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### Chapter 1. Read Me First

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#### Introduction

This chapter introduces DocumentDirect and ViewDirect Technology, Mobius Management Systems' integrated suite of products for instantaneous online viewing, data retrieval and export, automated distribution, and archiving of enterprise documents.

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## What is DocumentDirect?

DocumentDirect is a client-server product for the Windows operating system that provides a single user interface to locate, view, annotate, and print any document or image located on any platform in the enterprise. An integral part of the Mobius ViewDirect technology suite of products, it provides powerful tools to retrieve and export data to other software applications, automate repetitive tasks, and manipulate the way documents and images are displayed. In addition, you can customize how DocumentDirect looks and functions to meet the needs of both users and systems administrators.

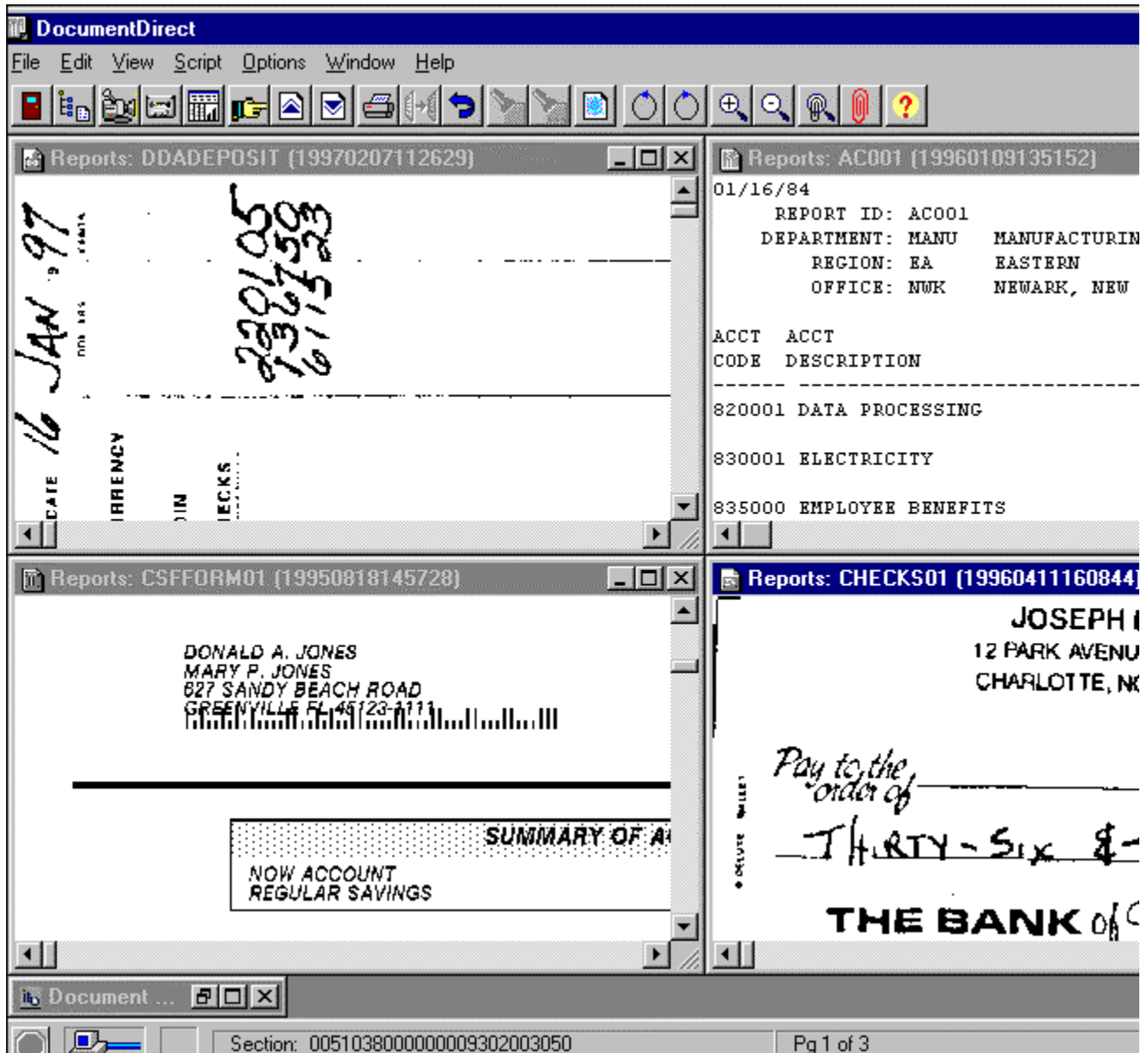


Figure 1-1. Access to all Documents

## Typical Uses of DocumentDirect

DocumentDirect provides a highly customizable cross-industry solution for any business

function that involves accessing electronic documents. Some typical uses of DocumentDirect include:

- Customer service query through online statement viewing
- Check imaging, reconciliation, and customer query
- Claims processing
- Healthcare records management and processing
- Records management and archiving of legally required documents
- Data mining and analysis using spreadsheets and other PC software
- Viewing and storage of manufacturing plans and drawings
- Accounts payable reconciliation
- Enterprise resource planning

## ***Overview of ViewDirect Technology***

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ViewDirect technology is an integrated product suite for high-volume storage, high-speed indexed access, and electronic distribution of enterprise information. It provides Internet and network-based solutions to a broad range of application and e-business requirements.

ViewDirect technology helps enterprises meet a complex challenge: the need to manage staggering volumes of diverse information and the expectation that highly customized views of this information can be delivered on demand to any customer, partner, or employee.

ViewDirect stores and integrates information in virtually any format on a wide variety of computing platforms and electronic storage devices, making it instantly available through automated distribution and user access over the Internet and corporate networks. It integrates with back-office systems, including enterprise resource planning applications, and Web-enables documents for use with front-office systems such as customer support and electronic bill and statement presentment.

Regardless of the hardware and software environment, ViewDirect technology makes any document on any platform available to any user. Figure 1-2 shows how these products work together to offer a comprehensive, integrated solution for document archiving and retrieval.

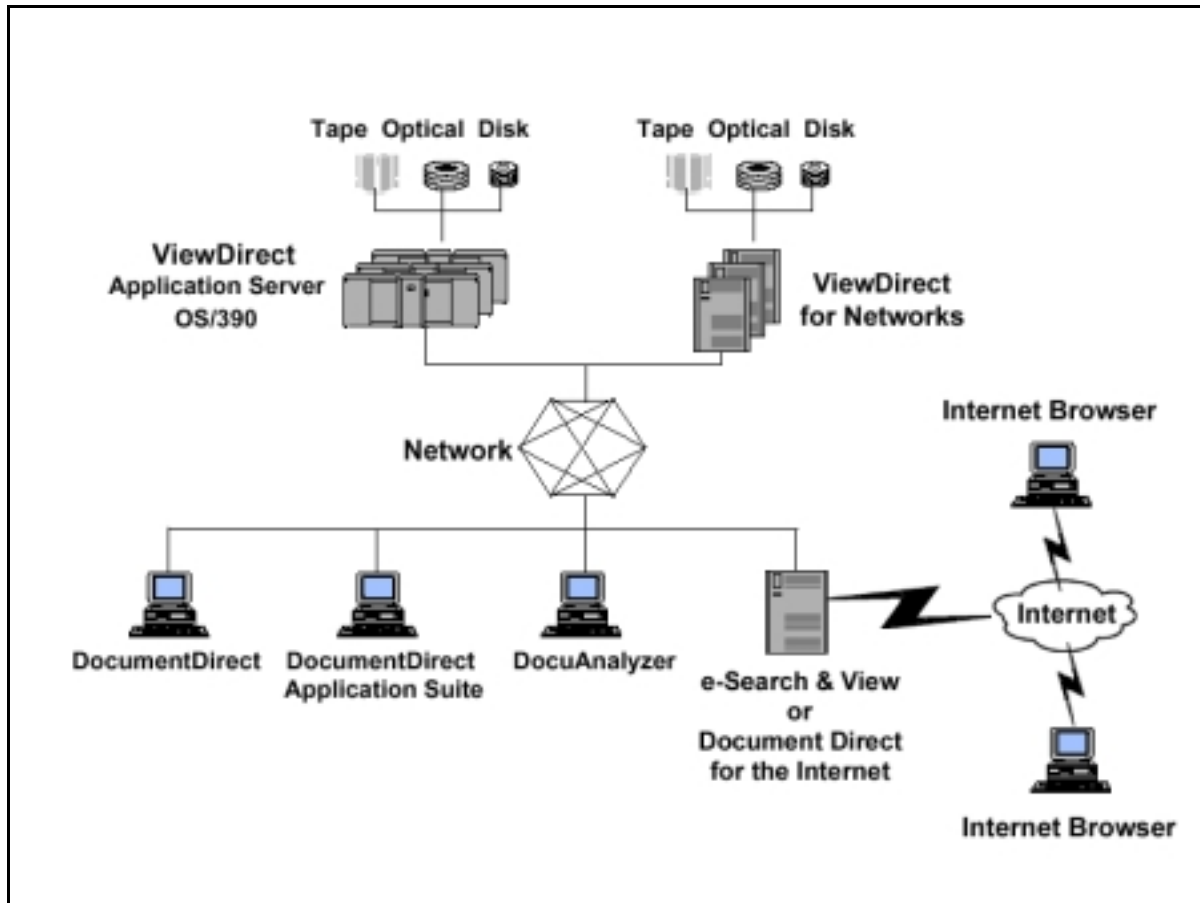


Figure 1-2. The Mobius ViewDirect Technology

## ***DocumentDirect in the Enterprise***

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DocumentDirect works in conjunction with ViewDirect technology in your existing hardware and software environment to provide a true client-server and cross-platform solution supporting high-speed access to and convenient use of all enterprise documents and data.

DocumentDirect provides a single user interface to locate, view, and print any document or image located on any platform in the enterprise. In addition, DocumentDirect provides powerful tools to:

- Retrieve and export data to other software applications
- Manipulate the way documents and images are displayed
- Annotate documents
- Automate repetitive tasks
- Change the way DocumentDirect looks and functions to meet the needs of both users and system administrators

DocumentDirect is an "industrial strength" solution, fully scaleable from small departmental systems to large, host-based, mission critical systems.

## **Typical Applications**

DocumentDirect is used to support research, data analysis, customer service and the transfer of data across software applications in a broad range of industries, including:

- Banking
- Insurance
- Financial
- Credit card
- Transportation
- Manufacturing
- Legal
- Communications

## **Customize to Meet the Needs of the Enterprise**

Virtually every aspect of DocumentDirect can be customized by either users or administrators. Customizable aspects include:

- DocumentDirect functions installed

- Types of servers accessed
- Communications protocols used
- Languages in which the DocumentDirect interface is displayed
- Languages of the documents displayed
- How DocumentDirect looks and functions

## National Language Support

DocumentDirect supports a number of languages including Chinese, Danish, English, French, German, Italian, Japanese, Korean, Portuguese, Spanish, and Swedish. National language support displays the user interface, messages, and Help topics in the language of your choice. It allows you to view and use report and topic archives in the language of your choice. DocumentDirect also supports the ANSI/EBCDIC translation for the euro sign, the currency symbol of the European Monetary Union.

## ***DocumentDirect Functions***

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DocumentDirect provides all the functions you need to locate data and turn it into useable information, regardless of:

- Where it's located
- What platform it was created on
- What platform it is currently located on
- What format it's in

## **Locate Documents**

Mobius' ViewDirect technology products deliver access to high-volume, unstructured stores of documents, images, reports, and data. DocumentDirect works in conjunction with ViewDirect to provide high-speed, indexed access to, and electronic distribution of, enterprise information located on multiple servers running different operating systems, regardless of file format.

For example, a customer service manager searches incident records that are stored as LPFD documents on a Windows NT server. The search may continue into service report statistics stored as traditional management reports on an MVS host. DocumentDirect can also be used to perform further investigation into detailed product assembly information stored as image files on a UNIX server.

## **View Documents**

DocumentDirect provides a single point of access for you to view documents in any file format and to manipulate what is displayed so it's easy to find the information you want.

### *File Formats*

Using DocumentDirect you can view:

- Character reports, or traditional management reports, originating from either network file servers or central file servers such as large MVS systems.
- Checks, letters, handwritten documents, photographs, or any image – stored in common formats such as TIFF, JPEG, IBM ABIC, PCX, WMF, and BMP.
- Laser printer formatted documents such as statements and invoices created using:
  - ◆ IBM Advanced Function Printing (AFP), including MO:DCA datastream format
  - ◆ Xerox DJDE/Metacode
  - ◆ Hewlett-Packard Printer Control Language (PCL)
  - ◆ Adobe PostScript and Portable Document Format (PDF)



- Popular PC file formats such as XLS and DOC.

DocumentDirect makes it easy to compare different documents or different versions of the same document. Figure 1-3 shows how diverse documents can be displayed in multiple tiled windows allowing you to quickly and easily do comparisons and cross-checks.

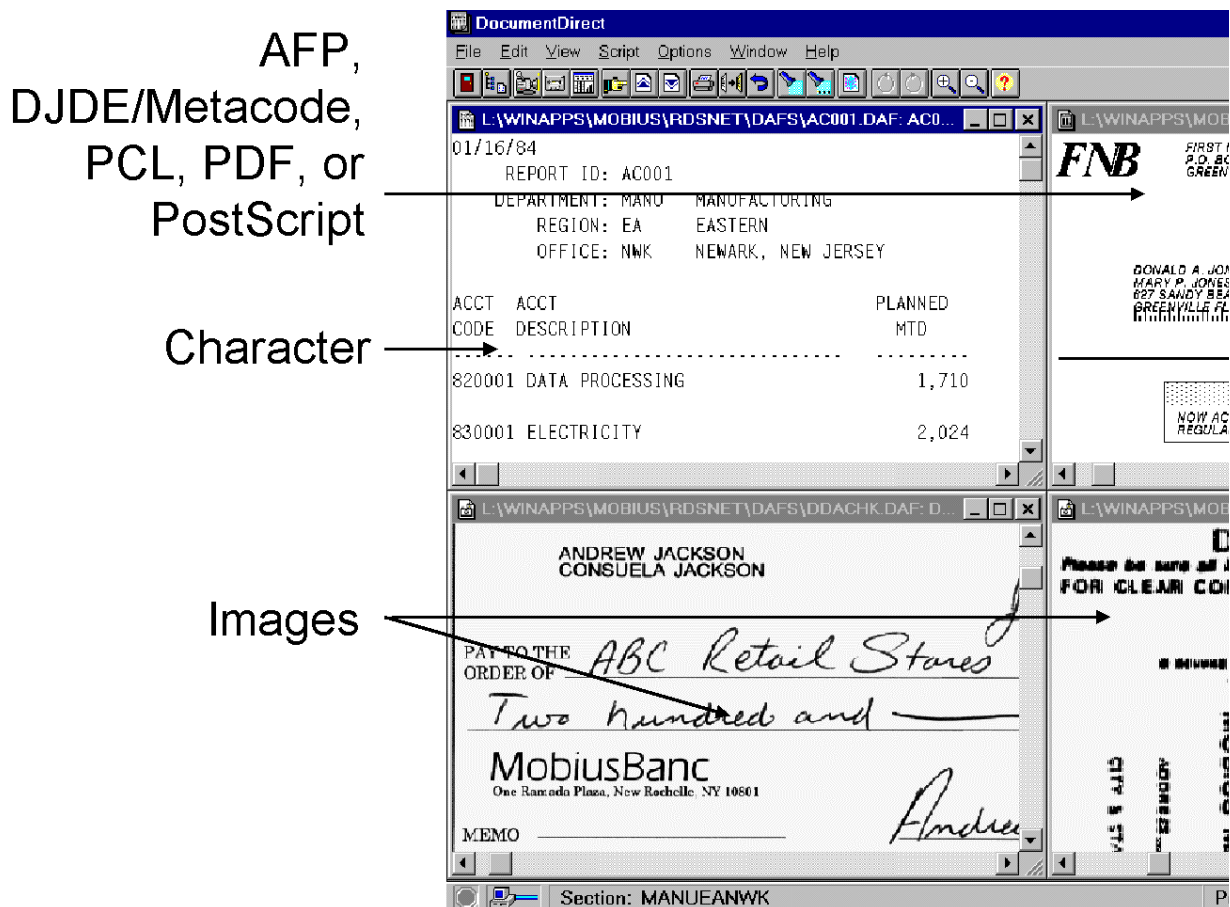


Figure 1-3. ViewDirect Supports All Types of Documents

## DocumentDirect Viewer and Native Viewers

DocumentDirect lets you view documents using the DocumentDirect viewer. And, because all archived documents are stored and retrieved in their native formats, DocumentDirect can use Windows file type associations to launch the appropriate Windows application, such as Adobe Acrobat, Microsoft Word, or Microsoft Excel.

## Viewing Flexibility

DocumentDirect provides a wide range of options for manipulating the display of reports and documents. DocumentDirect supports:

- Showing or hiding document annotations
- Increasing or decreasing the display size of images

- Rotating images
- Changing the color depth of images
- Changing the font in which data is displayed
- Rearranging report columns and rows
- Full page document display
- Freezing column and row headings so they are visible when scrolling
- Moving data elements for easy viewing

## **Annotate Documents**

DocumentDirect provides you with the ability to attach annotations – text, "sticky notes," image and audio files, highlight bars, lines, arrows, shapes, and measurement lines – to documents. Annotations remain attached to their documents, no matter where the report archive is migrated.

## **Retrieve and Export Data**

DocumentDirect makes it simple for you to retrieve data from and export it to other software applications, eliminating the need to re-key data or perform mass downloads of host-based data. You can:

- Use the Copy to Clipboard function to paste highlighted data into the destination application.
- Use DocumentDirect's File Export function to export pages of text to ASCII files.

- Set up data extraction templates using DocumentDirect's Visual Parser.

The Visual Parser lets you graphically define fields, preview the data extraction results, and then export to CSV or SYLK files. Policies can be reused with different versions of the same report or with different reports, saving time and effort. And if your report or LPFD document changes, policies can be updated quickly and easily.

The screenshot displays the DocumentDirect 2.2 Visual Parser interface. The main window shows a data table with columns: ACCT CODE, ACCT DESCRIPTION, PLANNED MTD, ACTUAL MTD, VARIANCE MTD, PLANNED YTD, and ACT YTD. The data is organized by department (MANUFACTURING), region (EASTERN), and office (NEWARK, NEW JERSEY). Below the table, there are three configuration windows: Metadata Window, Field Window, and Group Window. The Field Window shows a hierarchical tree structure for defining fields, including YTD\_VARIANCE, Level 2, Acct\_Code, Acct\_Descr, and Act\_YTD. The Group Window shows a list of groups, including Group1, which contains Acct\_Code, Acct\_Descr, and Act\_YTD. The bottom status bar indicates the section is MANUEANWK, page 1 of 1, and the policy is levels.

ACCT CODE	ACCT DESCRIPTION	PLANNED MTD	ACTUAL MTD	VARIANCE MTD	PLANNED YTD	ACT YTD
820001	DATA PROCESSING	1,710	3,048	1,338	16,501	2
830001	ELECTRICITY	2,024	3,607	1,584	19,532	3
835000	EMPLOYEE BENEFITS	2,935	5,231	2,297	28,325	5
840001	EQUIPMENT RENTALS	797	1,421	624	7,697	1
860001	OFFICE SUPPLIES	99	177	78	959	
865001	POSTAGE, FREIGHT, ETC.	1,506	2,685	1,179	14,537	2
890001	REPRODUCTION	201	358	157	1,938	

Figure 1-4. DocumentDirect's Visual Parser

- Set up Dynamic Data Exchange (DDE) links to move document data to workstation software such as Lotus 1-2-3, Microsoft Excel, Microsoft Word, or any other PC software supporting DDE.

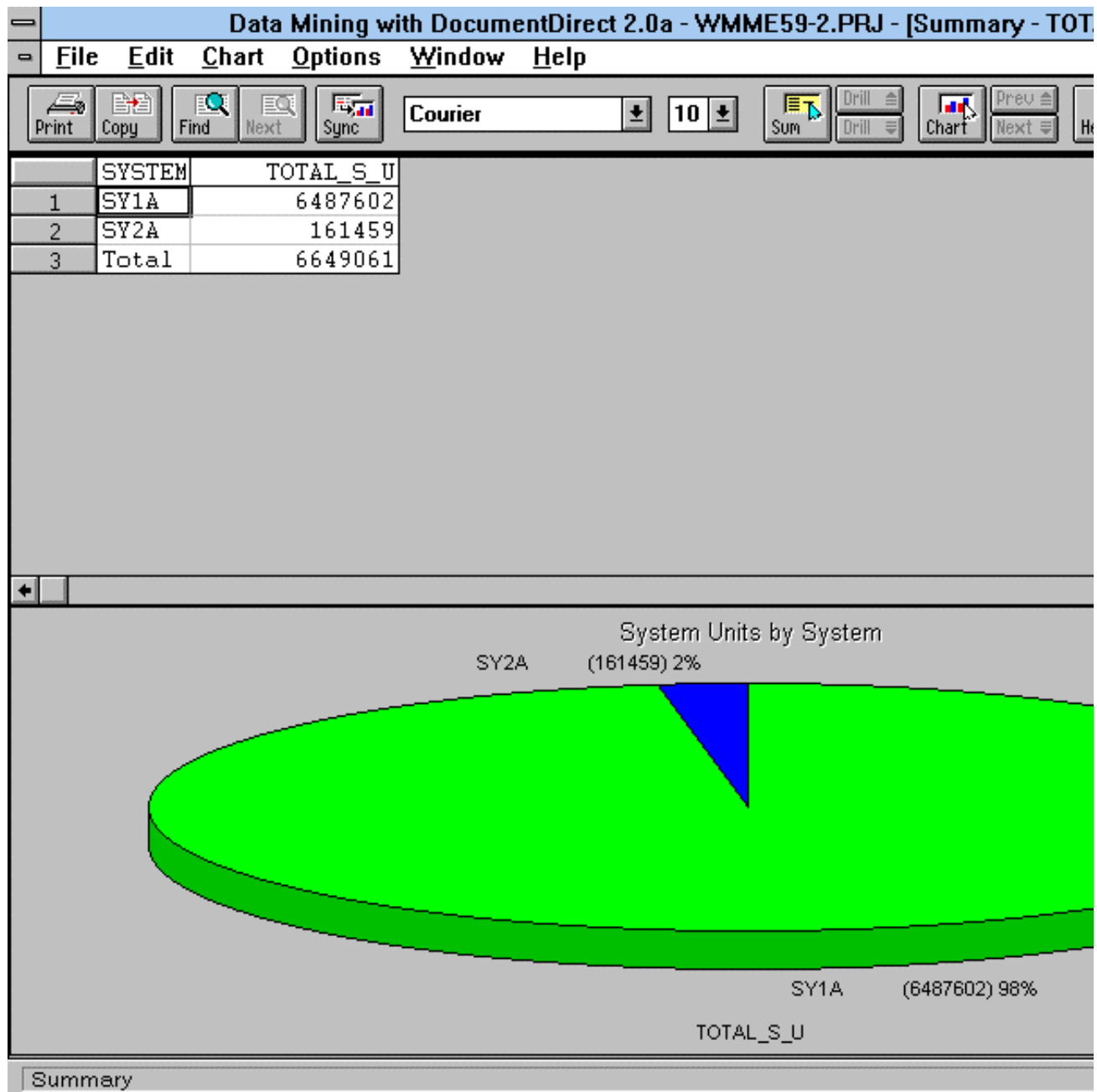


Figure 1-5. From Report Data into Spreadsheets, Fast and Easy

## Print On-Demand

Printing at a local printer is simple. With a click of the mouse, DocumentDirect prints a single image, a single page, selected pages, a range of pages, or the entire report on a workstation printer. By default, DocumentDirect prints documents in background mode, allowing you to continue working while the document is printing.

DocumentDirect provides a permanent view of the original document or report, including logos, data, and all of the original business form formatting. DocumentDirect allows you to print copies of the original document on any Windows-compatible printer.

## Automate Repetitive Tasks

DocumentDirect provides powerful scripting capabilities that allow you to create scripts to perform repetitive tasks. It's easy to record a series of actions and save them for later execution. You can also create or edit script files using a text editor.

Scripts perform *all* DocumentDirect functions:

- Report access
- Viewing manipulation
- Annotation
- Data retrieval
- Data extraction
- Data export
- Printing

Scripts can automatically open a report, prompt you for the name of a policy, apply the policy to the report, update DDE links, and export data to other software applications.

## Customize DocumentDirect to Meet Your Needs

DocumentDirect can be customized to meet the needs of the enterprise, system administrator, and users. You can control the types of servers accessed, communications protocols used, and the languages in which documents and interface are displayed. You also have control over how the DocumentDirect interface looks and functions.

### *Customize User Access to Functions*

Administrators have the ability to restrict which DocumentDirect functions are available to users. An example of this is restricting user access to the **Password Maintenance** and **Customize Interface** functions. Restricted functions are not shown in menus or on toolbars. And, if a user attempts to run a restricted function from a DocumentDirect script, the command is not executed and an error is generated.

### *Customize the User Interface*

You have the ability to customize the DocumentDirect interface in the following ways:

- Change the way the entries in the Document Explorer window are displayed
- Create custom toolbars that can be floated or docked
- Create custom menus and submenus

- Add custom buttons to toolbars and commands to menus that run DocumentDirect scripts and Windows programs
- Change all toolbars and menus by deleting, rearranging, and renaming buttons, commands, toolbars, and menus



*Figure 1-6. DocumentDirect Toolbar, Custom Toolbar, and Custom Menu*

## Customize Behaviors

You have the ability to change how DocumentDirect behaves in the following ways:

- When DocumentDirect is started, it can automatically open reports and run custom DocumentDirect scripts.
- Custom DocumentDirect scripts and Windows programs can be run from the DocumentDirect toolbars and menus.
- DocumentDirect provides the ability to set up different DocumentDirect configurations for different groups of users. This means an administrator can adapt DocumentDirect to a group of users by providing different:
  - ◆ Toolbars and menus, and different access to different functions depending on the user's responsibilities in the enterprise.
  - ◆ Security and administrative options such as maximum number of reusable sessions, time-out, password, and logging error messages.
  - ◆ Text viewing options such as default display font, DBCS text output, and ANSI-to-EBCDIC translation.
  - ◆ LPFD viewing options such as viewing resolution and caching location of LPFD resources.
  - ◆ LPFD printing options such as print resolution, caching location of resources, and the Windows font to use if the document's original font is not available to the printer.
  - ◆ Image viewing options such as initial size and orientation of image documents.
  - ◆ Windowing options such as window sizing and toolbar display.
  - ◆ Annotations options such as default font for annotation text and display options for annotations.

- ◆ External viewers to use when viewing files with Windows file associations.
- ◆ Policy options such as working directory for policy files and how the Field Settings dialog is displayed.
- ◆ Other options such as drives displayed in the Document Explorer window, size of the history list, default paths, and background printing options.

## ***DocumentDirect Features***

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### **Central and Distributed Server Access**

DocumentDirect provides the ability to simultaneously display an unlimited number of documents or images that reside on different systems: Windows NT, UNIX, Novell NetWare, workstation hard drive, or MVS. Archives are created and stored on any document server, including ViewDirect for Networks and ViewDirect for MVS.

### **ServerTransparency®**

DocumentDirect makes it easy to access enterprise documents across servers. You are only concerned with what document you need, not where it is or how to get to it. DocumentDirect allows you to:

- Find documents without knowing where the documents are physically stored.
- Simultaneously view documents on multiple servers, even across platforms.
- Quickly locate the document you want among the millions of documents that are stored.
- Maintain the index independently of the documents or the servers.

### **Legal Record Keeping**

Combined with a ViewDirect for Networks or ViewDirect for MVS document server, DocumentDirect provides the total solution for creating and viewing documents retained for legal, regulatory, or business purposes. DocumentDirect provides a permanent view of the original report or document, and can print copies of that original on any workstation printer.

### **EnterpriseIndexing™ – Easy Access and Virtual Folders**

ViewDirect technology's powerful EnterpriseIndexing™ provides DocumentDirect users with a quick path and direct access to large volumes of data. EnterpriseIndexing™ features include:

- Unlimited alternate indexes. Define as many paths to the documents and images as required.
- Unlimited index entries. Index very large volumes of documents and images, *even at the field level*.
- Indexing across time. Build and update index entries for documents and images added over long periods of time.
- Indexing across document and image types. Provide a virtual folder view of selected documents and images. For example, a single folder could reference all of the following:
  - ◆ Laser printer formatted documents, such as statements of account, invoices, and billing summaries.
  - ◆ Character documents, such as management reports.



- ◆ Image documents, such as letters or checks.

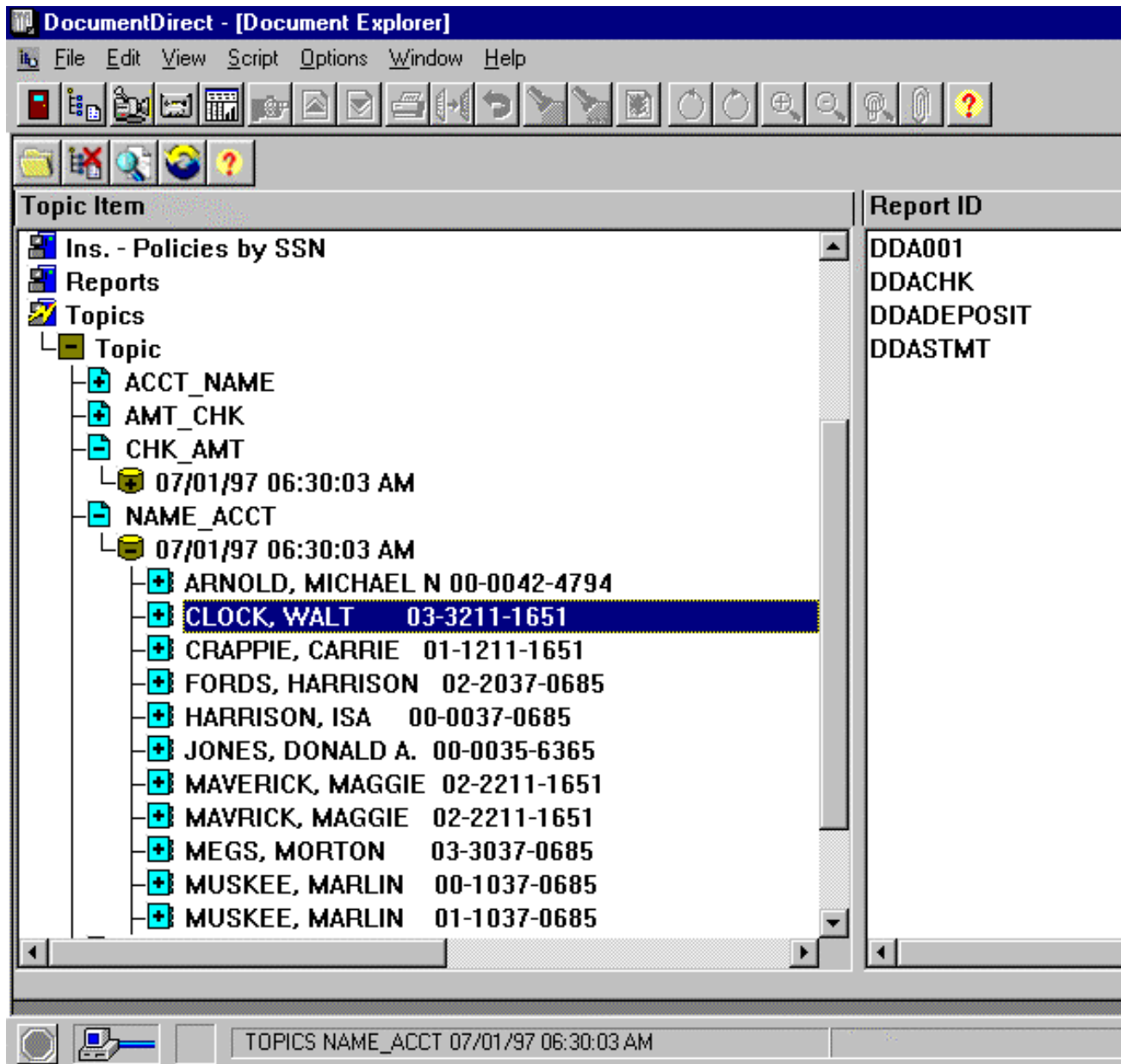


Figure 1-7. Virtual Folders

## UniversalArchive™

The Mobius UniversalArchive™ provides a standard envelope for archived documents. It is truly independent of hardware, storage server, or media constraints. Achieving 100% platform independence, it protects your enterprise data against costly hardware and format incompatibility. UniversalArchives™:

- Can be moved from or to any device without reprocessing.
- Allow inexpensive storage and access to documents without staging archives to disk.
- Support virtually any device including disk, optical disk, CD-ROM, and tape.

## Document Access, Data Integrity, Security, and Controls

ViewDirect technology provides complete flexibility in restricting users or groups of users access to only those documents or sections of documents for which they are authorized. This is highly customizable by user, group, documents, document section, and type of access: online viewing, hardcopy printing, or softcopy E-mail. For example, users may have different access privileges for online viewing than they do for receiving hardcopy report documents. Additionally, groups of users can share the same authorizations. Groups greatly simplify administration.

ViewDirect technology stores just one copy of each document and creates *virtual folders* that allow the user to see specific reports, documents, or images, even down to the page level. Access to virtual folders is controlled dynamically through the information stored in the Mobius database.

DocumentDirect works with your existing security protocols to protect data integrity. Using client-server architecture, DocumentDirect gives authorized users access to data throughout the network. The document access windows display the document servers, customized lists of reports, and the versions and sections of reports available to each specific user. Disaster recovery and backup can be performed using systems already in place.

## Network Flexibility

You do not have to worry about compatibility with multiple systems, nor do you need to be concerned about future network plans. DocumentDirect works with virtually all network protocols, leveraging your existing networks. DocumentDirect works with the following communications protocols:

- **TCP/IP** - the industry standard transport protocol to mainframes and other systems from Windows workstations
- **CPI-C** - a general-purpose communications interface across IBM platforms
- **HLLAPI** - as supported by many Windows 3270-terminal emulation packages, including those that support TCP/IP

## Minimize Network Traffic

DocumentDirect's efficient architecture minimizes the load on your network and optimizes the use of the correct platform for each function. Intelligent Object Processor architecture moves objects, such as data, actions, and requests, through the network to process them on the most efficient platform. For example, a simple SEARCH command would first be executed on the workstation on data already on the workstation. If the search is not satisfied on the workstation, it is shipped to the document server. The results of the remote search are then moved to the workstation, minimizing network traffic and taking advantage of each platform's functions.



## Chapter 2. Opening Documents

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### Introduction

This chapter tells you how to open documents.

### Contents

#### Opening Documents

- Selecting a Document from the Document Explorer Window

- Selecting a Document using the Locate Dialog

- Opening Documents Associated with Windows Applications

#### Document Explorer

- Window Features

- Mouse and Keyboard Functions

- Changing a ViewDirect for MVS Document Server Password

- The ViewDirect for Networks Document Server

- Icons

#### Supported File Types

#### DocumentDirect Toolbar

#### DocumentDirect Menu Bar

#### Context Menus

## ***Opening Documents***

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After starting DocumentDirect, you can open and view documents. To open a document, select the Document Explorer option from the File menu. DocumentDirect displays a Document Explorer window similar to the example shown in Figure 2-1. The left side shows a list of document servers.

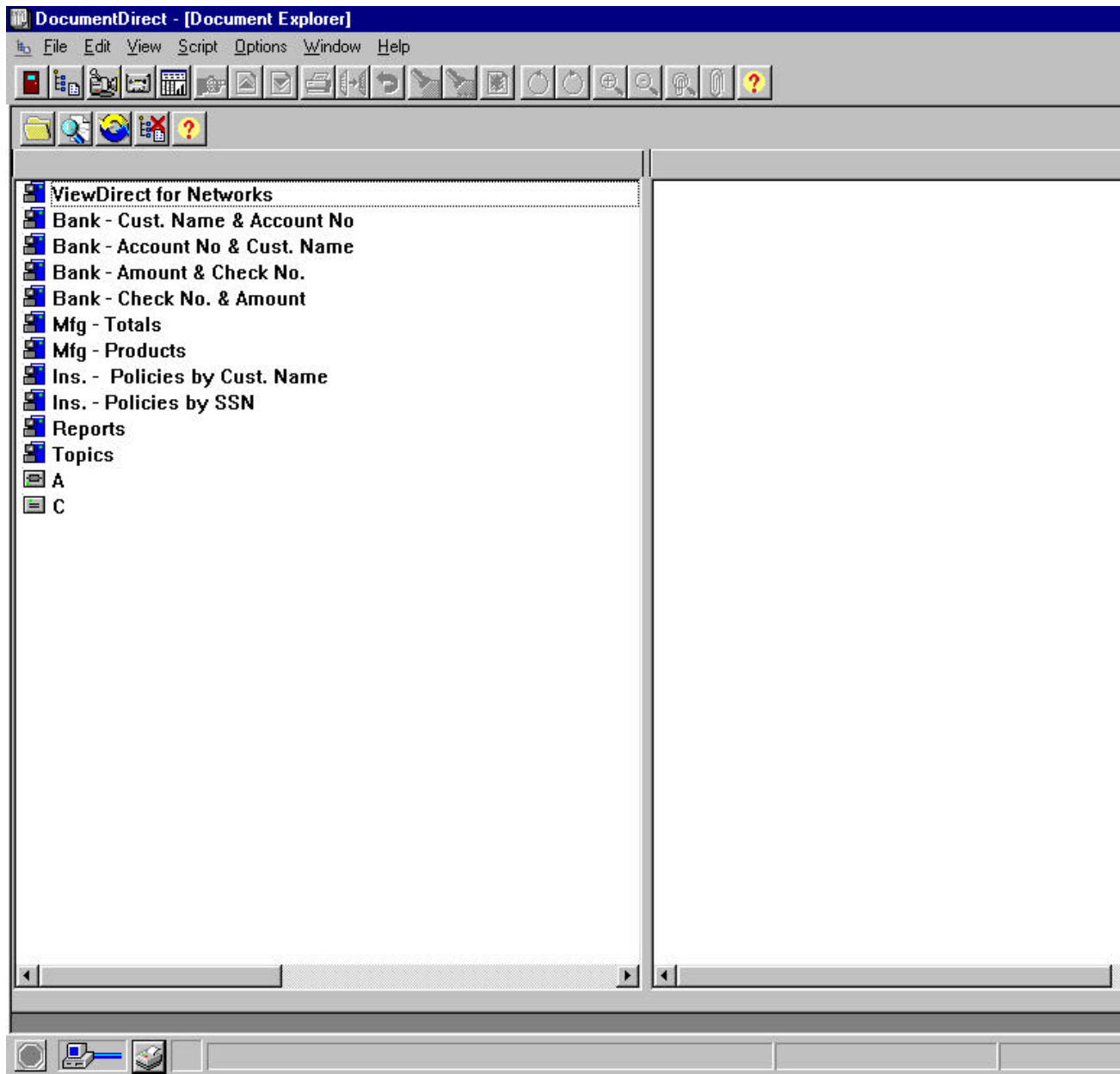


Figure 2-1. The Document Explorer Window

As described in the next two sections, you can open a document in one of the following ways:

- Select the document from the Document Explorer window.
- Select the document through the Locate dialog.

DocumentDirect keeps track of the documents you have most recently viewed. To open one of these documents select the document name in the history list of the File menu.

**Note:** You may also be able to use a predefined key sequence to open documents from a 3270 terminal emulation program without first starting DocumentDirect. When you execute the key sequence, DocumentDirect will start and display the desired document automatically. Contact your system administrator to determine whether this feature is enabled for your emulator and, if so, which key sequence you should use. For more information, refer to Chapter C5, "Opening Documents from a 3270 Terminal Emulator Session."

## Selecting a Document from the Document Explorer Window

1. Click the icon next to the document server on which the document is stored. DocumentDirect connects to this document server and, depending on how Document Explorer was configured, displays a list of Topic IDs or Report IDs.

Reports archived by ViewDirect for MVS and ViewDirect for Networks are identified by Report ID and Version ID and are broken down internally by Section ID. Enterprise Indexes are identified by Topic ID and are broken down internally by topic version, topic item, Report ID, and report version.

2. Expand a list item by clicking the icon next to it. Lists can expand to any point in the report or topic hierarchy. Figure 2-2 shows an expanded list.

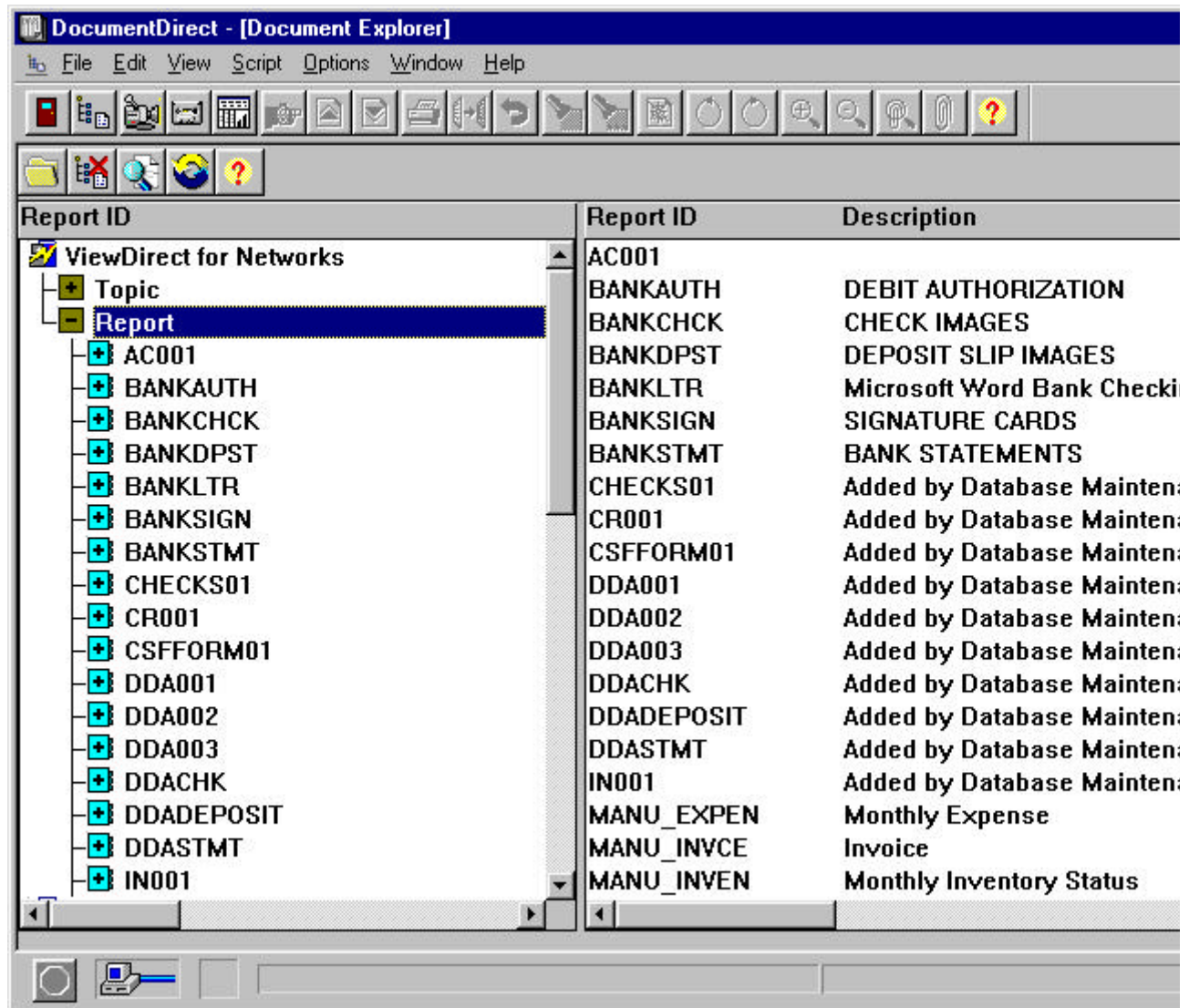


Figure 2-2. Expanded Stand-Alone Document Server

When you expand a document server, you also connect to it. Depending on how the Recipient ID and Password fields of the New/Edit Document Server dialog were configured, you might be prompted to enter a Recipient ID and password the first time you connect to a document server. You can open an archive or display its section list only if your Recipient ID has the proper authorization. For information on changing ViewDirect for MVS document server passwords, refer to "Changing a ViewDirect for MVS Document Server Password."

When you expand a stand-alone document server, it shows *only* subdirectories and DAFs. Each DAF name is listed with its Report ID and Version ID. The Version ID dates are the dates when the archives were created. When you expand a drive letter, it does not show DAFs; it shows only subdirectories and files other than DAFs.

For information on configuring Document Explorer, see "Customizing Document Explorer" in Chapter C1

3. Locate the document in the displayed hierarchy and double-click it. Depending on how your External Viewers options were set, the document is either displayed in the DocumentDirect window or DocumentDirect launches a Windows application that displays the document. For information on specifying file types to be opened with Windows applications, see "Setting User Preferences" in Chapter C1.

## Notes:

- To access different reports or lists, disconnect from the document server then reconnect using a different Recipient ID.
- To update the list of documents with those added while you were connected to the document server, disconnect from the document server then reconnect.
- To improve performance, reduce the number of connections to document servers by disconnecting from them.

To disconnect from the document server, highlight the document server and select Close from the File menu of the Document Explorer window.

## Selecting a Document using the Locate Dialog

As shown in Figure 2-3, the Locate dialog provides three tabs: **Report**, **Topic**, and **File**. **Report** and **Topic** allow you to search for documents and enterprise topics residing on document servers configured for ViewDirect for MVS and ViewDirect for Networks systems. **File** allows you to search document servers configured for your workstation hard drive or on the network to which your workstation is connected.



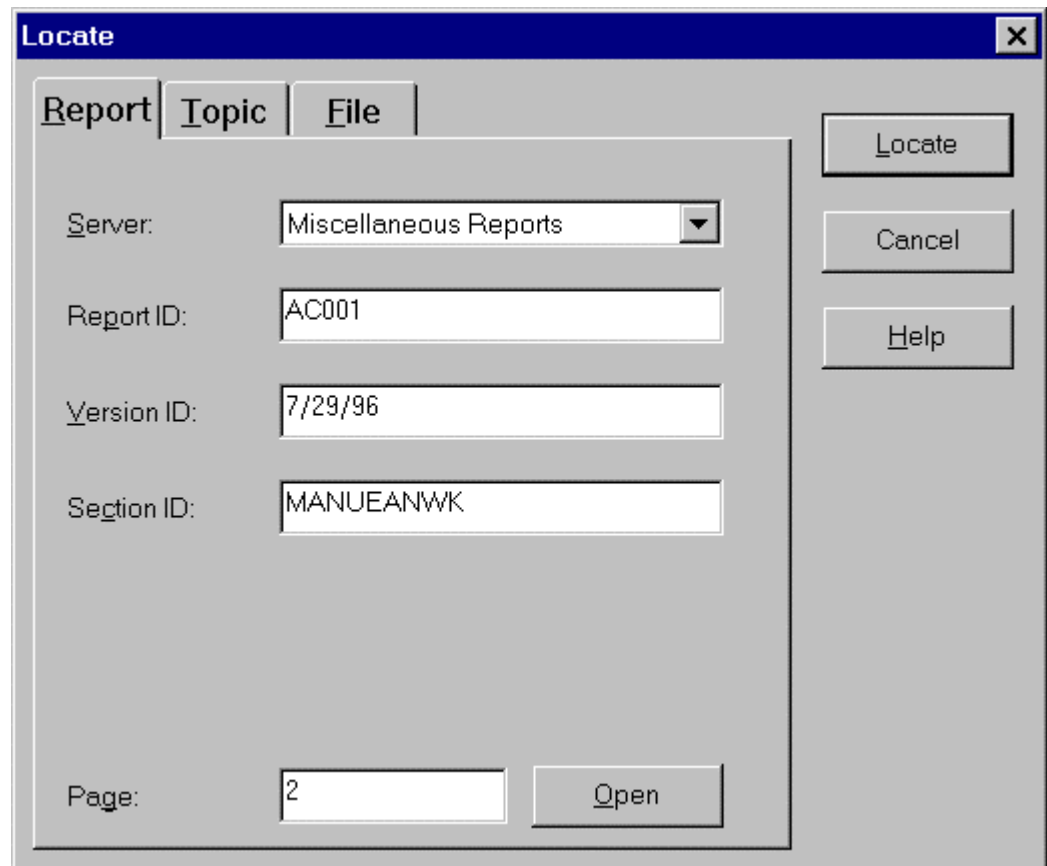


Figure 2-3. The Locate Dialog

When using Locate, keep the following guidelines in mind:

- You can enter a partial character string for any ID on the Locate dialog. If you specify a partial ID, or if Locate does not find an exact match for any ID entered in the Locate dialog, Locate opens the closest match.
- If you enter a partial or full ID in any of the fields in the Locate dialog and leave any of the ID fields above it blank, the blank fields default to the first entry of that type. For example, if you enter a Version ID on the **Report** tab, but leave the Report ID blank, Locate finds the first report in the list and tries to match the Version ID.
- A Version ID consists of a date followed by a time. Enter the date and time formats in the format specified in the Windows Date/Time Control Panel. If you specify a partial Version ID, the date elements default to the current month, day, and year; the hour defaults to 11; and the minutes and seconds default to 59. For example, if you enter a Version ID of 3/4, and your date format is set to MM/DD/YYYY, the Version ID appears as 03/04/1998 11:59:59.

To locate entries, perform the following steps:

1. Click the Locate button (or select **File|Locate**). The Locate dialog displays the tab corresponding to the entry that was highlighted in the Document Explorer window.

- ♦ For reports, a tab like that shown in Figure 2-4 appears, with the fields pre-filled based on the entry highlighted in Document Explorer when you selected Locate. Enter additional information about the report's location. The following fields are available:

The screenshot shows a Windows-style dialog box titled "Locate". It has three tabs: "Report", "Topic", and "File". The "Report" tab is selected. Inside the "Report" tab, there are five input fields: "Server" (a dropdown menu showing "Miscellaneous Reports"), "Report ID" (a text box containing "AC001"), "Version ID" (a text box containing "7/29/96"), "Section ID" (a text box containing "MANUEANWK"), and "Page" (a text box containing "2"). To the right of these fields are three buttons: "Locate", "Cancel", and "Help". At the bottom right, there is an "Open" button next to the "Page" field.

Figure 2-4. The Locate Dialog, with Report Tab Entries

Field	Description
Server	Name of the entry you want to search.
Report ID	Report ID of the report you want to locate.
Version ID	Version ID of the report you want to locate.
Section ID	Section ID of the report you want to locate.
Page	Page number to which you want to open the section. Page number applies to the section indicated in the Section ID field.

- ♦ For topics, a tab like the one shown in Figure 2-5 appears. The following fields are available:

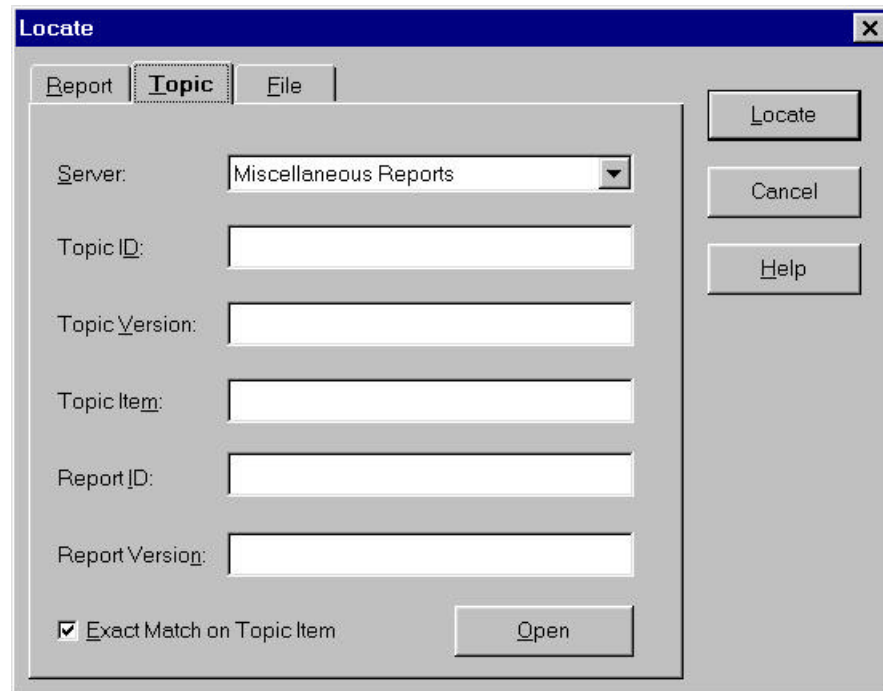


Figure 2-5. The Locate Dialog, with Topic Tab Entries

Field	Description
Server	Name of the entry you want to search.
Topic ID	Enterprise Index Topic ID you want to locate.
Topic Version	Enterprise Index topic version you want to locate.
Topic Item	Enterprise Index topic item you want to locate.
Report ID	Report ID of the report containing the topic you want to locate.
Report Version	Report version containing the topic you want to locate.
Exact Match on Topic Item	<p>Only locate reports whose topic item matches exactly the search string in the Topic Item field. If DocumentDirect does not find an exact match, it returns an error message. When this checkbox is not selected, DocumentDirect returns the closest match to the search string in the Topic Item field.</p> <p>Note that DocumentDirect completes Locate searches faster when this option is checked.</p>

- ◆ For documents archived on document servers such as your workstation or network drives, a tab like the one shown in Figure 2-6 appears. The following

fields are available:

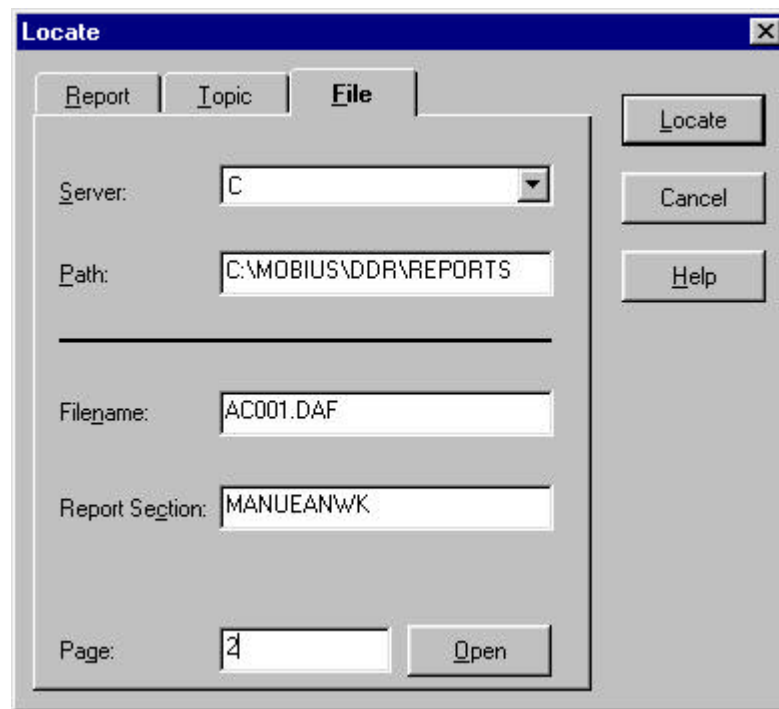


Figure 2-6. The Locate Dialog, with File Tab Entries

In Field...	Enter...
Server	Name of the entry you want to search.
Path	Path of whatever is selected in the Document Explorer window. This field cannot be edited.
Filename	Filename of the document to locate. To specify additional path information, enter it here.
Report Section	Report section you want to locate. This field is valid only for Document Archive Files.
Page	Page to which you open the document. For Document Archive Files, page number applies to the selected section.

2. Do one of the following:

- ◆ To simply locate the document in the Document Explorer window, click **Locate**. Document Explorer finds the document, scrolls the list to its location, and highlights the document name.

- ♦ To open the document, click **Open**. Depending on how your External Viewers options were set, the document is either displayed in the DocumentDirect window, or DocumentDirect launches a Windows application that displays the document. For information on specifying file types to be opened with Windows applications, see "Setting User Preferences" in Chapter C1. If a page number is specified in the **Page Number** field, the document opens to that page in the specified section.

## Opening Documents Associated with Windows Applications

If you open a ViewDirect for MVS or ViewDirect for Networks document with a file type to be opened with a Windows application, DocumentDirect launches the application and writes the data to a temporary file with the appropriate data type extension, for example, XLS for a Microsoft Excel spreadsheet. The DocumentDirect viewing window contains the name of the temporary file and the name of the viewing application. Figure 2-7 shows a spreadsheet opened by Microsoft Excel.

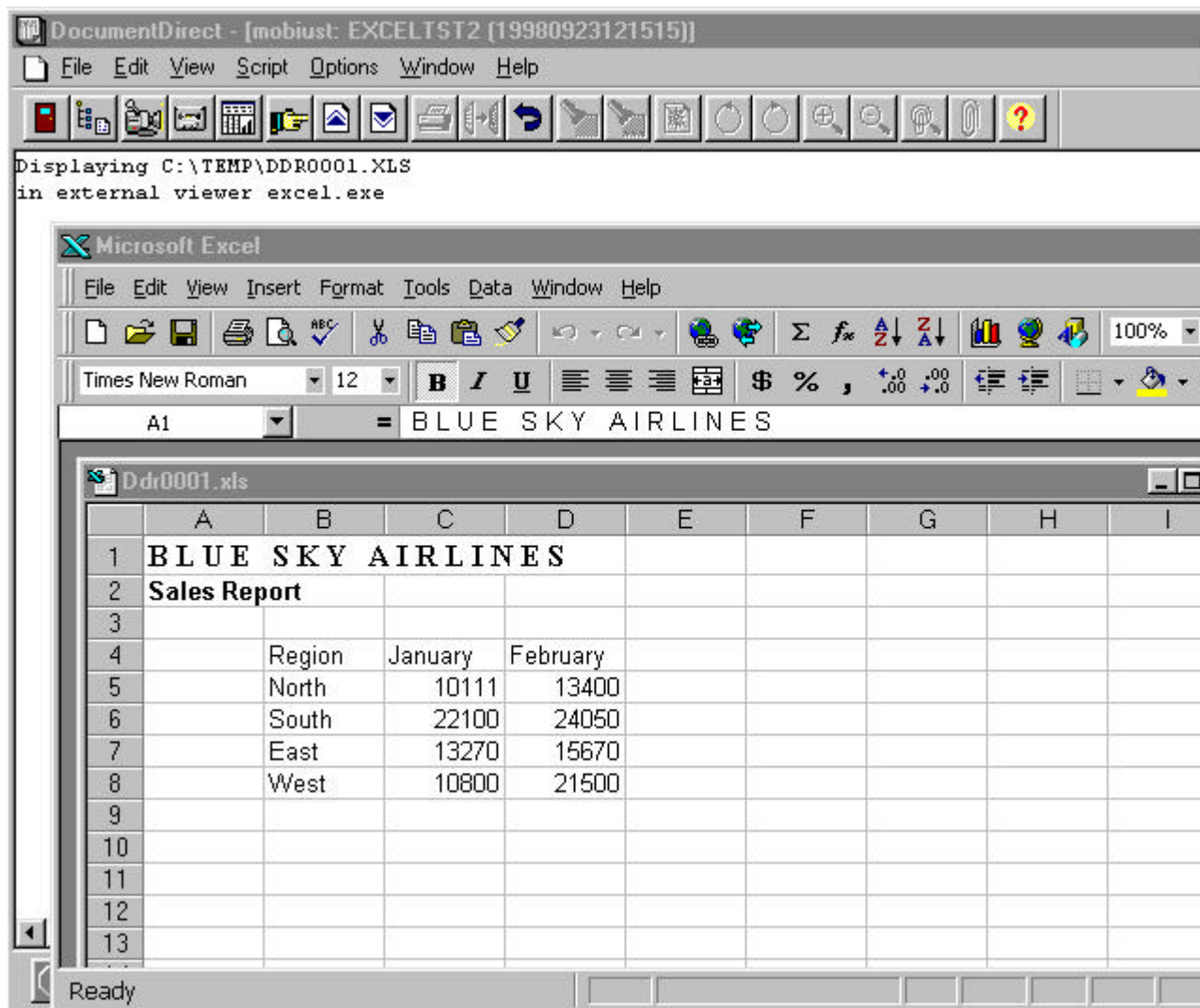


Figure 2-7. Spreadsheet Opened by Microsoft Excel

If you make changes to the document form within the associated viewing application, save the changes using **File|Save As** rather than **File|Save**. Do not use **File|Save**, because that saves changes to a temporary file that is deleted when you exit DocumentDirect.

For information on specifying file types to be opened with Windows applications, see "Setting User Preferences" in Chapter C1.

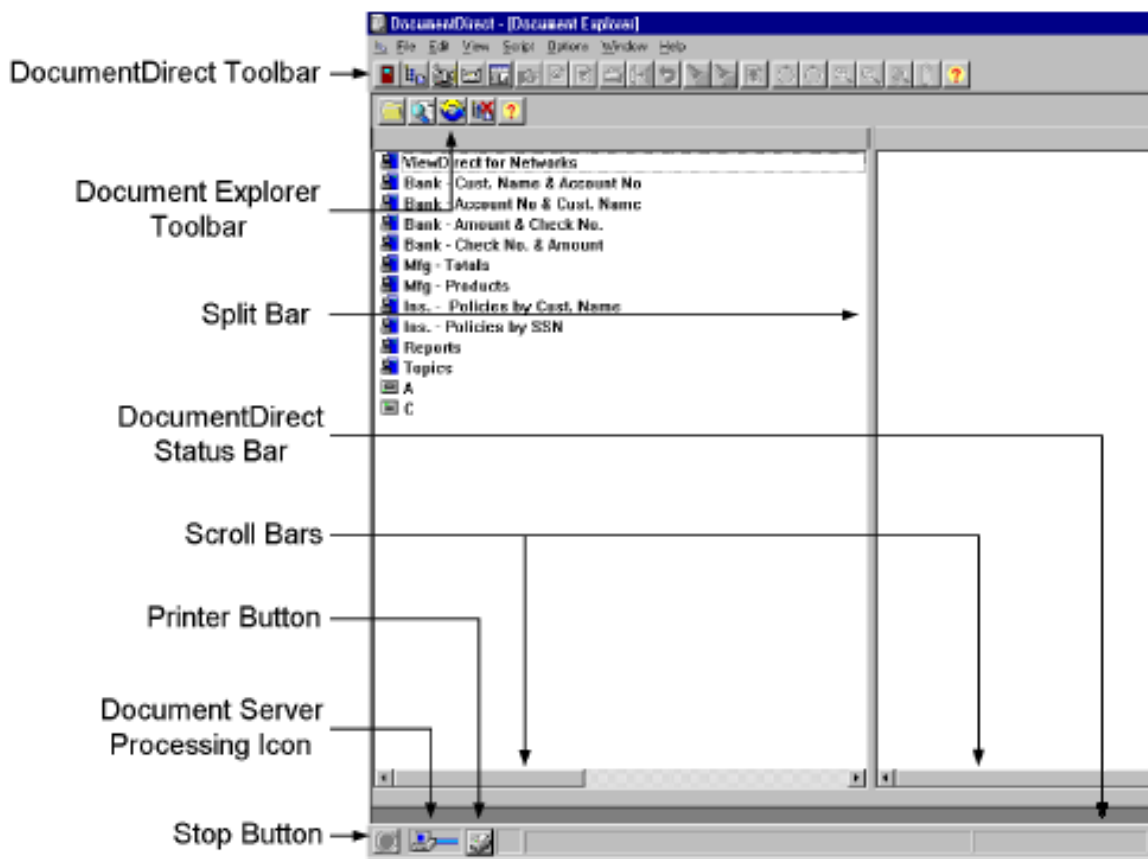
## ***Document Explorer***

---

Document Explorer provides a number of features to help you locate specific documents located on any accessible document server. The following sections provide information to help you use Document Explorer most efficiently.

### **Window Features**

The Document Explorer window is illustrated in Figure 2-8:



*Figure 2-8 The Document Explorer Window*

The Document Explorer window is split into two parts. The left side lists document servers to which you have access. The right side lists details about the selected entry.

You can modify your view of the window as follows:

- To hide the right side of the Document Explorer window, select the Explorer Detail option of the View menu.
- To customize the left side entries, see "Customizing Document Explorer" in Chapter C1.
- To minimize the Document Explorer window to an icon when a document is opened, select the Minimize Explorer on Use option on the View menu.

Features available in the Document Explorer window are explained in the following table:

Feature	Description
DocumentDirect Toolbar	Click the toolbar buttons for quick access to DocumentDirect functions. To display pop-up text explaining what a button does, hold the mouse pointer over the button. See "DocumentDirect Toolbar" later in this chapter for an explanation of all toolbar functions.
Document Explorer Toolbar	Toolbar buttons provide the following functions: <ul style="list-style-type: none"> <li>• Open: Open a selected document.</li> <li>• Locate: Locate documents (see "Selecting a Document using the Locate Dialog" in this chapter).</li> <li>• Refresh: Refresh the view of the selected list item.</li> <li>• Exit: Close the Document Explorer window.</li> <li>• Help: Access Document Explorer Help.</li> </ul>
Document Server Processing Icon	Indicates whether document server communication is in progress: <ul style="list-style-type: none"> <li>• Black background – communication is in progress.</li> <li>• Gray background – communication is not in progress.</li> </ul>
Printer Button	Opens the Print Manager window to allow users to view jobs that are printing in the background. This button is enabled only when the Background Printing option is selected on the Miscellaneous tab of the Preferences dialog.
Stop Button	Stops communications with document servers. Button is red when document server communications are taking place.

Feature	Description
DocumentDirect Status Bar	<ul style="list-style-type: none"> <li>• Left Side: Displays document server processing messages, annotation indicator, and report and section names for the current report.</li> <li>• Right Side: Displays page numbers for the current report. If the document is a multi-page TIF, IOCA, or AFP image, and it is displayed in individual page view, sub-page numbers in square brackets are also displayed.</li> </ul>
Split Bar	Drag bar to display more of left or right side of window.
Scroll Bars	Scroll Document Explorer lists horizontally or vertically.

## Mouse and Keyboard Functions

Document Explorer window functions for mouse and keyboard use are explained in the following table:

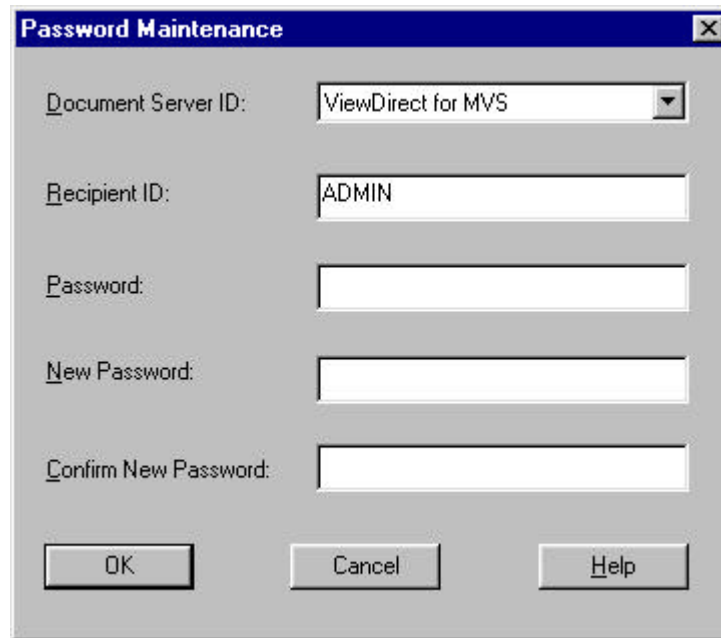
To...	Action	
	Mouse	Keyboard
Move highlight bar up or down a displayed directory	Click an entry.	Press a cursor movement key.
Expand the list of an entry's contents	Click the icon next to a highlighted entry. (See the sections "Icons" later in this chapter.)	Highlight the entry and press the + key on the number keypad.
Collapse an expanded list	Click the icon next to an entry already displaying an expanded directory.	Highlight the entry and press the - key on the number keypad.
Display a detailed list of an entry's contents in the right side of the Document Explorer window	Click an entry.	Move highlight bar to an entry.



	Mouse	Keyboard
Open a document	Double-click a document name. OR Right-click the document name, then select <b>Open</b> from the pop-up menu. OR Click the document name, then select <b>Open</b> from the Document Explorer toolbar (or select <b>File Open</b> ).	Highlight a document name and press <b>Enter</b> . OR Highlight a document name, then select <b>Open</b> from the Document Explorer toolbar (or select <b>File Open</b> ). OR Highlight a document name, press <b>Shift+F10</b> , then select <b>Open</b> .
Refresh an entry's contents in the left side of the Document Explorer window	Highlight the topmost entry you want to refresh. Right-click and select <b>Refresh</b> from the context menu.	Highlight the topmost entry you want to refresh. Press <b>F5</b> .
Refresh an entry in the right side of the Document Explorer window	Highlight the entry you want to refresh. Right-click and select <b>Refresh</b> from the context menu.	Highlight the entry you want to refresh. Press <b>F5</b> .

### Changing a ViewDirect for MVS Document Server Password

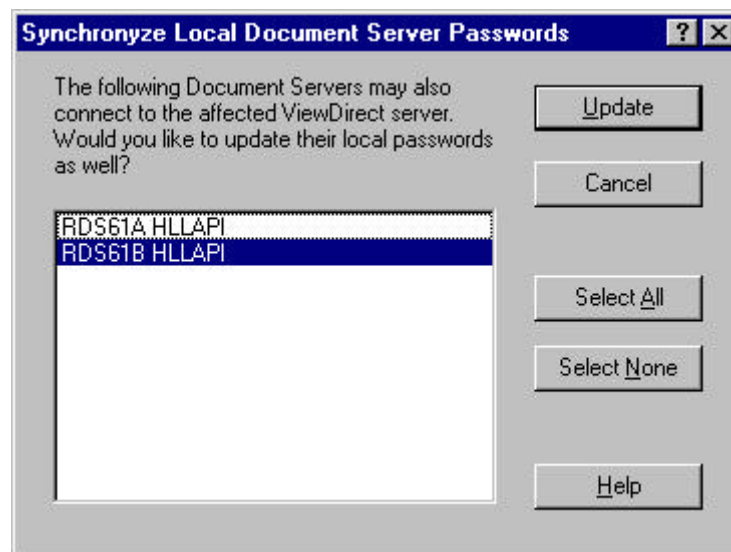
You can change a ViewDirect for MVS document server password by selecting Password Maintenance from the Options menu or by right-clicking the document server to which you want to connect. The following dialog is displayed:



The Password Maintenance dialog box has a title bar with a close button. It contains five input fields: Document Server ID (a dropdown menu showing 'ViewDirect for MVS'), Recipient ID (a text box with 'ADMIN'), Password (an empty text box), New Password (an empty text box), and Confirm New Password (an empty text box). At the bottom are three buttons: OK, Cancel, and Help.

Enter the current password in the Password field, and enter the new password in both the New Password and Confirm New Password fields. Click **OK**. Document server passwords are saved in encrypted format in the RDSWIN.INI file.

If DocumentDirect finds another document server that refers to the same ViewDirect for MVS document server, uses the same protocol, and has the same password saved in RDSWIN.INI, the Synchronize Local Document Server Passwords dialog is displayed as follows:



The Synchronize Local Document Server Passwords dialog box has a title bar with a question mark and a close button. It contains a text area with the message: 'The following Document Servers may also connect to the affected ViewDirect server. Would you like to update their local passwords as well?'. Below this is a list box containing two items: 'RDS61A HLLAPI' and 'RDS61B HLLAPI', with the second item highlighted. To the right of the list box are five buttons: Update, Cancel, Select All, Select None, and Help.

You can update the passwords for the highlighted document servers by clicking **Update**.

## The ViewDirect for Networks Document Server

The ViewDirect for Networks Document Server is an application that runs in the background, performing client-server transactions initiated in DocumentDirect or the ViewDirect for Networks Archive Creator client. A ViewDirect for Networks client-server session is open when the Waiter icon shown below appears on your desktop taskbar.



There may be multiple ViewDirect for Networks client-server sessions open at any time. To display information about open sessions, double-click the icon. The ViewDirect for Networks Document Server window shows the session number, the Recipient ID, the most recent transaction performed, and the status of the transaction.

### Warning

**Do not exit the ViewDirect for Networks Document Server.** Doing so terminates the sessions improperly. Open client applications experience errors and may abort.

## Icons

### Document Server Icons

Right-clicking a document server icon displays a menu of document server functions.



Indicates that the entry to the right of the icon is stored on a document server.



Indicates that the entry to the right of the icon was expanded and the results cached.



Network hard drive.



Floppy disk drive; green light - empty, red light - loaded.



CD ROM drive; no disk - empty, disk displayed - loaded.



PC hard drive; green light - collapsed, red light - expanded.

### Document Icons

Right-clicking a document icon displays a menu of document functions.



List of Reports or Topics; plus sign - collapsed, minus sign - expanded.



Topic; plus sign - collapsed, minus sign - expanded.



Document with versions and sections; plus sign - collapsed, minus sign - expanded.



Document on mounted volume; plus sign - collapsed, minus sign - expanded.



Document on unmounted volume.



Version not found.



Document, topic, or version on disk; plus sign - collapsed, minus sign - expanded.



Migrated version; recall required.



Document section, available.



Document, available.

## Supported File Types

---

You can open, view, and print the following types of files:

- Character files, such as traditional management reports.
- Laser Printer Formatted Documents (LPFD) such as:
  - ♦ Statements and invoices created using IBM AFP
  - ♦ Xerox DJDE/Metacode
  - ♦ Adobe PostScript and PDF
  - ♦ Hewlett-Packard PCL

You can view these documents only through DocumentDirect and only as archives on a ViewDirect document server.

- Image files listed in the following table.

File Extension	File Type

File Extension	File Type
BMP	All uncompressed bitmap graphics.
CAL	CALS Raster (Type 1, 2, 3 and 4). Typically CCITT type compressed bi-tonal images.
DIB	Device Independent Bitmaps.
FPX	Kodak FlashPix. A common image file format.
ICA	IOCA images with the following compression types: <ul style="list-style-type: none"> <li>• Uncompressed.</li> <li>• ABIC and Concatenated-ABIC (grayscale). ABIC compressed HPTS check and deposit slip image reports, single or multi-page, in both monochrome and 8-bit grayscale.</li> <li>• CCITT Group 3 1D, Group 3 2D, and Group 4</li> <li>• JPEG</li> </ul>
IMG	All GEM bitmap graphics.
JBG	JBIG. A lossless compressed file format for bi-tonal (black and white) grayscale and color images.
JPG	All JPEG files that comply to the JFIF standard.
PCD	Kodak PhotoCD. A common high-resolution format for images on CD-ROM.
PCX/DCX	Monochrome, 16 color, 256 color, and 24-bit color PC Paintbrush bitmap graphics.
PNG	Standard and interlaced Portable Network Graphics bitmap graphics.
PSD	Photoshop 3.0. The format produced by the Adobe Photoshop graphics editor.
RAS	Sun Raster format. Native to Sun UNIX platforms.
TGA	8-bit, 16-bit, 24-bit, and 32-bit TARGA bitmap graphics, including both versions 1 and 2 of the file format.

File Extension	File Type
TIF	<p>All of the following compression types and colors, including multi-page TIFF files:</p> <ul style="list-style-type: none"> <li>• Uncompressed</li> <li>• Packbits</li> <li>• Modified Huffman Encoding</li> <li>• CCITT Group 3 1D, Group 3 2D, and Group 4</li> <li>• Monochrome</li> <li>• 16 color</li> <li>• 256 color</li> <li>• 24-bit color</li> </ul>

- Associated data documents, that is, files whose extensions are associated with a Windows application, also referred to as External Viewers, such as Microsoft Word or Microsoft Excel. You can view the file only if the application is available to your workstation and if the file type is identified as one that DocumentDirect should open with a Windows application. For more information on identifying file types to be opened by Windows applications, see "Setting User Preferences" in Chapter C1.

### DocumentDirect Toolbar

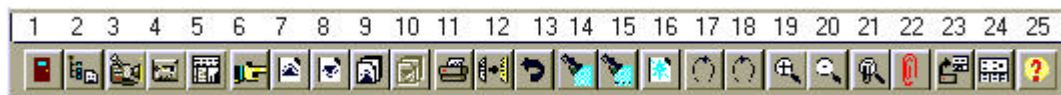


Figure 2-9. Default DocumentDirect Toolbar

The DocumentDirect toolbar is normally "anchored" just below the DocumentDirect menu bar. You can "float" the toolbar, that is, move it anywhere on your desktop by clicking the gray space around the toolbar buttons and dragging the toolbar away from the edge of the program window. You can re-anchor the toolbar to any side of the program window by dragging it to the edge. It snaps into place along the edge of the program window.

DocumentDirect also provides users and administrators the ability to customize the default DocumentDirect toolbar and to create custom toolbars. See "Customizing Toolbars and Menus" in Chapter C1 for more information.

The DocumentDirect toolbar buttons function as listed below:

1. Exit DocumentDirect
2. Display Document Explorer window
3. Start/stop script recording
4. Play back a script

5. Start DocuAnalyzer
6. Go to a page in an open document
7. Page up in an open document
8. Page down in an open document
9. Page up to the previous sub-page of the current page
10. Page down to the next sub-page of the current page
11. Print the current page
12. Copy current selection to the clipboard
13. Undo last action
14. Find text in an open document
15. Find next occurrence of text in an open document
16. Clear view
17. Rotate image counter-clockwise 90 degrees
18. Rotate image clockwise 90 degrees
19. Enlarge page by 25%, centering any marked data or the part of the page in the viewing area
20. Reduce page by 20%, centering any marked data or the part of the page in the viewing area
21. Display annotations
22. Edit annotations
23. Load a policy
24. Edit or create a policy
25. View Help

## ***DocumentDirect Menu Bar***

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*Figure 2-10. Default DocumentDirect Menu Bar*

The default DocumentDirect menu bar is located just below the program title bar and contains the following menus:

- File
- Edit
- View
- Script
- Policy
- Options
- Window

- Help

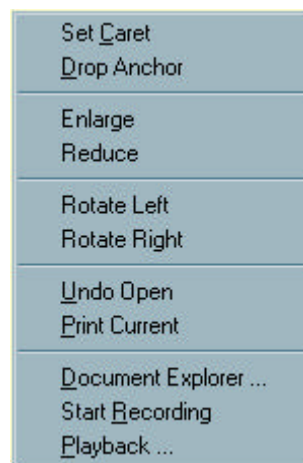
DocumentDirect also provides users and administrators the ability to customize the default DocumentDirect menu bar and to create custom menus and submenus. See "Customizing Toolbars and Menus" in Chapter C1 for more information.

## ***Context Menus***

---

DocumentDirect provides context menus that you can display by clicking the right mouse button when your cursor is in a character document, an image document, or on an icon in the DocumentDirect window.

For example, to display the context menu of an image document, click the right mouse button when the cursor is anywhere in an image document. The following menu is displayed:



## **Chapter 3. Viewing Documents**

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### **Introduction**

This chapter tells you how to move around a displayed text or image document. It summarizes the mouse actions, keystrokes, and menu options with which you view and annotate documents, modify views, and select text in documents displayed by DocumentDirect.

### **Contents**

Scrolling and Go To Functions

Caret Movement With the Mouse

Caret Movement with Keystrokes and Go To Command



- Go To Dialog
- Searching for Text
  - Find Dialog
  - Find Next Option
  - Find Option Restrictions
- Changing Fonts
- Changing the Display of a Report
- Marking Text
  - Mouse Commands
  - Edit Menu Options
  - Removing Marks
- Freezing Rows and Columns
  - Rearrange before Freezing
  - Freezing Text
  - Freeze Illustration
- Moving or Copying Text
  - Selecting Text to Move or Copy
  - Specify Where to Put Moved or Copied Text
  - Easiest Method
  - Move and Copy Dialogs
  - Move To and Copy To Dialogs
  - Move Illustration
- Hiding Text
  - Standard Method for Hiding Text
  - Alternative Method for Hiding Text
- Modifying the View of Image Documents
  - Adjusting Image Color Depth
  - Resizing Images
  - Rotating Images
  - Switching between Individual and Compound Page Views
- Viewing Laser Printer Formatted Documents
- Clearing the View
- Annotating Documents
  - Creating or Editing Annotations
  - Annotation Toolbox Buttons
  - Layering Annotations
  - Canceling Changes to or Deleting Annotations
  - Displaying Annotations

## ***Scrolling and Go To Functions***

---

This section describes how to move around a document.

### **Caret Movement With the Mouse**

The following mouse actions scroll the displayed text and reposition the caret, the Windows term for the blinking box that indicates where actions take effect. This blinking box is not the same as the mouse cursor or pointer.

Mouse Action	Result
<b>Left Mouse Button</b>	
Click	Remove marks from text.
Click and drag	Mark text as you drag the mouse. When you reach the edge of the window, text scrolls in the direction of mouse motion.
Click scroll bars	Move through the report page in the direction indicated with the mouse. The scroll bars only move you around in the page currently displayed.
<b>Right Mouse Button</b>	
Click	Choose <b>Set Caret</b> from the context menu. This moves the caret to the mouse cursor position. This action does not unmark selected text.

### **Caret Movement with Keystrokes and Go To Command**

The following keystrokes and commands can help you move around in reports.

Key/Command	Resulting Action
Page Down	Scroll down one screen of lines. When you reach the end of a page, the caret moves to the next page.
Page Up	Scroll up one screen of lines. When you reach the top of a page, the caret moves to the previous page.
Ctrl + Page Down	Go to the top of the next page.
Ctrl + Page Up	Go to the top of the previous page.
Down arrow	Scroll down one line. When you reach the end of a page, the caret moves to the next page.

Key/Command	Resulting Action
Up arrow	Scroll up one line. When you reach the top of a page, the caret moves to the previous page.
Right arrow	Scroll right one character. When you reach the edge of a window, the text scrolls in the direction of caret motion.
Left arrow	Scroll left one character. When you reach the edge of a window, the text scrolls in the direction of caret motion.
Ctrl + Down arrow	Scroll down one-sixth of the window. When you reach the end of a page, the cursor moves to the next page.
Ctrl + Up arrow	Scroll up one-sixth of the window. When you reach the top of a page, the cursor moves to the previous page.
Ctrl + Right arrow	Scroll right one-sixth of the window.
Ctrl + Left arrow	Scroll left one-sixth of the window.
Home	Go to the first column of the current row.
End	Go to the last column of the current row.
Ctrl + Home	Go to the upper left row or column of the current page.
Ctrl + End	Go to the lower right row or column of the current page.
Go to command	Specify a page to go to. The caret moves to the upper left corner of the specified page. See the description of the <b>Go To</b> dialog below.

**Go To Dialog**

When you choose **Edit|Go To**, a dialog like the one shown in Figure 3-1 appears.

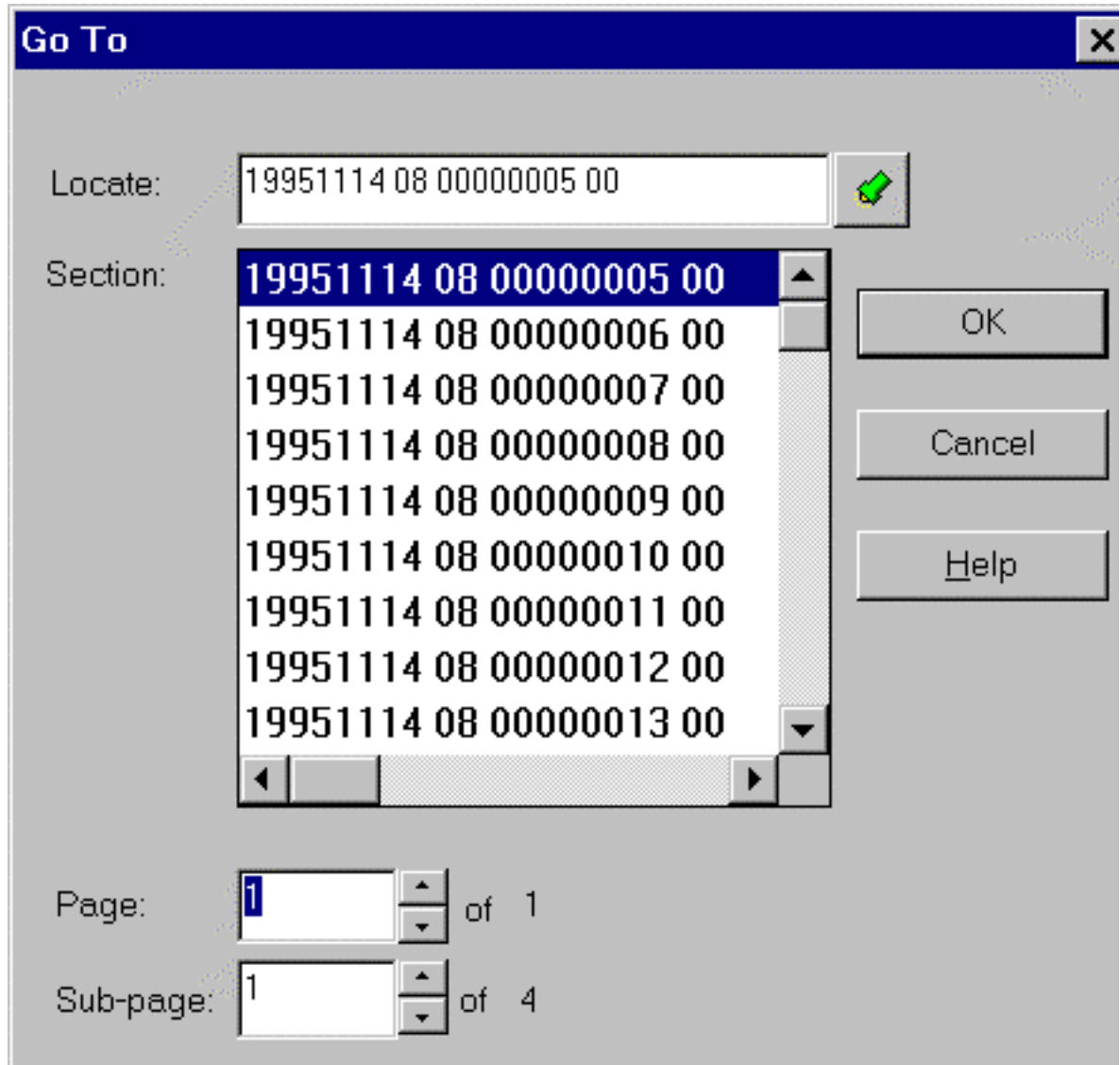


Figure 3-1. The Go To Dialog

**Note:** If you are viewing a report identified by a DOS path and filename or a report that does not contain sections, the Flashlight button does not appear in the Locate field in this dialog.

Field	Description
-------	-------------

Field	Description
Locate	Specify the report section you want to locate. If you do not specify a section, you go to the first section on the list.  If you enter the first few characters of the section name and click the Flashlight button, Go To locates the section name most closely matching what you entered in the Locate field.
Section	A list of available document sections. To go to a specific section, select the section name and click <b>OK</b> , or double-click a section name.
Page n of N	Select the page number (n) you want to go to. The page number is relative to the selected section. For example, 1 is the first page of the selected section, 2 is the second page, etc. If you enter a page number greater than the number (N) of pages in the section, you go to the appropriate page in a subsequent section. For example if the current section has 4 pages and you enter a page number of 5, you go to the first page of the next section. If you specify a number greater than the number of pages in the document, you go to the last page of the document.
Sub-page n of N	Select the number of the sub-page you want to go to. The Sub-page option is available only for TIF, IOCA and AFP images displayed in individual page view. If you specify a sub-page number greater than the number (N) of sub-pages in the page, you go to the last of those sub-pages.

When you choose **OK**, the caret moves to the upper left corner of the page specified.

## Searching for Text

---

DocumentDirect allows you to search for specific text using the **Find** option on the **Edit** menu. **Find** can search up or down within a document and can be case-sensitive. **Find** does have some restrictions, described in "Find Option Restrictions" later in this section.

To search for specific text within the report you are viewing:

1. Pull down the **Edit** menu and select **Find**.
2. Complete the Find dialog as described below.

## Find Dialog

When you choose **Find** from the **Edit** menu, the dialog shown in Figure 3-2 is displayed.

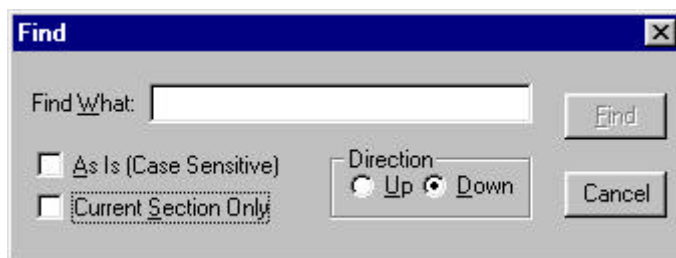


Figure 3-2. The Find Dialog

Field	Description
Find What	Type the text for which you want to search.
As Is (Case Sensitive)	Perform a search that distinguishes between uppercase and lowercase letters. In a case sensitive search, you must specify the text <i>exactly</i> as it appears in the file. For example: Equipment does not find EQUIPMENT EQUIPMENT does not find Equipment
Current Section Only	Search for the string within the current section only.
Direction Up/Down	Search for text in the specified direction. Down is the default selection.
Find	Begin the search.
Cancel	End the search.

When you complete the dialog and choose **Find** for a text report, the caret moves to the first character of text matching the string you entered in the Find What field. In an LPFD report, the caret does not move.

If the search string is not found within  $n$  report pages of the caret location, where  $n$  is the number of pages your DocumentDirect administrator specified in the RDSWIN.INI file, the following message is displayed:

```
W088E- Text 'search text' not found in n pages. Do you want to continue?
Yes/No
```

To continue the search, select Yes; to end the search, select No.

If the search string is not found in the report, the following message is displayed:

```
W044W- Text 'search text' was not found
```

## Find Next Option

To find the next occurrence of previously searched text in the current report, open the **Edit** menu and choose **Find Next**. **Find Next** continues the search in the same direction as the original **Find** request.

In text reports, each **Find Next** continues the search on the current page, moving the caret to each occurrence on the current page, and then continuing the search on subsequent pages. In LPFD reports, each **Find Next** locates the next page containing the search string, but does not highlight any occurrence of the string.

## Find Option Restrictions

Please note the following **Find** option restrictions:

1. **Find** cannot locate text that is frozen.
  2. **Find** cannot locate text in overstrike characters.
  3. In LPFD reports, **Find** does not search resources such as overlays and graphics.
  4. **Find** searches the following reports in  $n$  page units, where  $n$  is the number of pages your DocumentDirect administrator specified in the RDSWIN.INI file:
    - Reports identified by a DOS path and filename.
    - Reports stored on any of the following document servers:
      - ◆ INFOPAC-RDS for MVS 5.2
      - ◆ ViewDirect for MVS 6.1 or later
      - ◆ ViewDirect for Networks 3.2
- If the search string is not found within the specified number of pages from the caret position, a message is displayed asking if you want to continue the search.
5. **Find** cannot search LPFD reports stored on INFOPAC-RDS for MVS 5.2 document servers.

## Changing Fonts

---

You can alter the appearance and size of character data displayed in DocumentDirect with the **Font** option on the **View** menu. DocumentDirect supports display of many common fixed-pitch fonts defined in Windows, including TrueType fonts. Only fixed-pitch fonts are displayed in the Font dialog unless special conditions call for the use of proportional fonts, also called non fixed-pitch fonts. For more information on displaying proportional fonts in the Font dialog, see the [FONT] information in "Customizing the RDSWIN.INI File" in Chapter C9.

The **Font** option is not available for image reports. If you need to increase or decrease the display size of an image report, open the **View** menu and select **Scale %**.

**Font** is often used to decrease text size to display more of the report on the screen at one time. You can, however, use **Font** to display larger characters, which are easier to read. The actual number of displayed columns depends on the resolution of your monitor and the fonts you installed for Windows. A font size of 8 or 6 points usually displays 132 columns of text in a maximized window. Experiment to find settings that give you the display characteristics you

want. To learn more about Windows fonts, consult your Windows documentation.

To change the font for a displayed report, pull down the **View** menu and select **Font**. The dialog shown in Figure 3-3 appears.

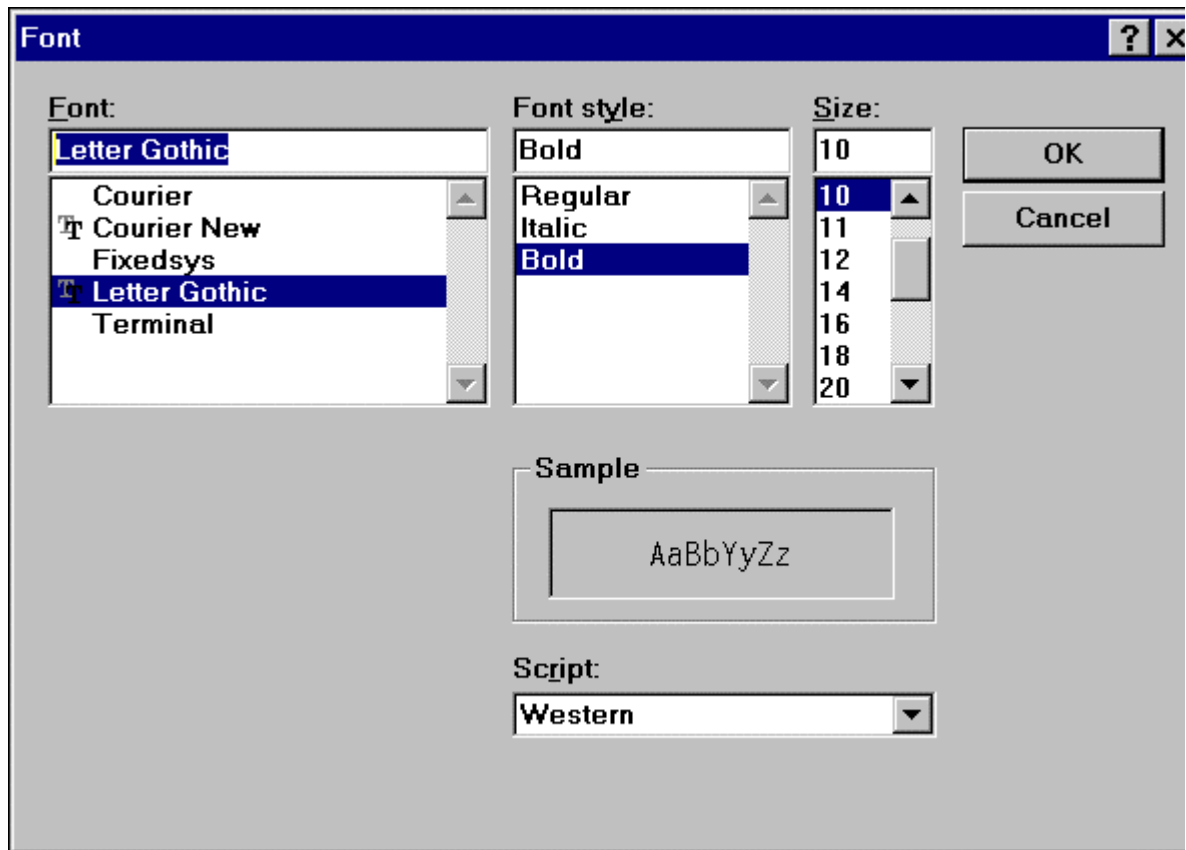


Figure 3-3. The Font Dialog

Field	Description
Font	List of all fonts available for displaying files through DocumentDirect. To ensure report readability, DocumentDirect displays fixed-pitch fonts in the Font dialog.
Font style	List of available styles. You may find one of the selections easier to read than the default Regular.
Size	List of available font sizes. If the size you want is not displayed, you may type another size. Experiment to find the size that best suits your viewing needs.
Sample	Sample of the text specified by your selections.



## Changing the Display of a Report

You can arrange the display of a report on your screen. The changes you make in the display view do not affect the stored report. Text reformatting performed on one page affects the display of all pages. For example, if you freeze, move, copy, or hide text on page 5, the same changes take effect on all pages. To change your view of a text or image report, use the options on the **View** menu, shown in Figure 3-4.



Figure 3-4. The View Menu

Option	Description
Freeze	Prevent rows or columns from scrolling.
Move	Remove selected text from one place and insert it in another.
Copy	Insert a copy of selected text in another position.
Hide	Remove selected text from the display.
Clear View	Restore the display to its original format.
Explorer Detail	Hide the right side of the Document Explorer window.

Option	Description
Minimize Explorer on Use	Minimize the Document Explorer window to an icon when a document is opened. Note that regardless of the Minimize Explorer on Use setting, the Document Explorer window is maximized while any report windows are maximized.
Annotations	Display or edit annotations, or cancel changes to annotations made in the current session.
<b>The following menu options affect text reports only:</b>	
Font	Change the font of the currently active text report.
<b>The following menu options affect image reports only:</b>	
Color Depth	Change the number of colors used in the current image report. Not valid for LPFD image reports.
Fit Width	Fit the displayed image to the width of your window. If you change the window size, you must invoke this option again to ensure correct display.
Fit Height	Fit the displayed image to the height of your window. If you change the window size, you must invoke this option again to ensure correct display.
Fit Paper	Fit the image onto the printable area of the paper selected under the <b>File</b> menu <b>Printer Setup</b> option. If you change the paper size or selected printer, you must select this option again to ensure correct printing. Printable area size is a function of the selected printer.
Scale %	Enlarge or reduce the size of the displayed image.
Actual Size	<p>If the image contains information about its original size, scale the image on the screen to that size. Otherwise, display the image at 100% scaling.</p> <p>For example, a 3-inch by 5-inch check may display at 300 by 500 pixels. Select this option to display the check image as a 3-inch by 5-inch image.</p> <p>If you select the Tile or Truncate Pages option for printing, the image also prints at the original size.</p>
Custom Size	Specify dimensions for the displayed image.
Rotation 0	Display image in its original orientation.

Rotation 90	Rotate image counter-clockwise 90 degrees from its original orientation.
Rotation 180	Rotate image counter-clockwise 180 degrees from its original orientation.
Rotation 270	Rotate image counter-clockwise 270 degrees from its original orientation.
Compound Page	Combine all of the individual sub-pages of a multi-page image into a single page. This option is available only for TIF and IOCA images.

Experiment with the various options on the **View** menu to become familiar with their operation. You can always restore the original view with the **Clear View** option.

The following sections describe procedures and menu options that allow you to rearrange the report display.

## Marking Text

---

Two methods are available for marking text: Mouse commands and **Edit** menu options. The method for removing marks is also described in this section.

### Mouse Commands

For most procedures, using the mouse is the easiest method to mark text. To mark text using the mouse, perform the following steps:

1. Place the mouse cursor at one corner of the text you wish to mark.
2. Hold down the left mouse button and drag the mouse to the opposite corner of the rectangle you wish to mark. As you drag the mouse, the rectangle is highlighted. If one corner is not currently displayed, start at the visible corner and drag toward the corner you cannot see. The display automatically scrolls in the direction of mouse movement.
3. Release the left mouse button. The rectangle of text you marked, which is known as a "block," is ready for further commands. Figure 3-5 shows a marked section of text.

**Note:** The **Freeze**, **Move**, **Copy**, and **Hide** menu options allow you to extend the mark to the top, bottom, left, or right page boundaries. This means you do not need to mark all the text you want to modify; you simply need to mark some portion of the affected rows or columns. These options are illustrated later in this chapter.

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ACCT CODE	ACCT DESCRIPTION	PLANNED MTD	ACTUAL MTD	VARIANCE MTD	PLANNED YTD
820001	DATA PROCESSING	1,710	3,048	1,338	16,501
830001	ELECTRICITY	2,024	3,607	1,584	19,532
835000	EMPLOYEE BENEFITS	2,935	5,231	2,297	28,325
840001	EQUIPMENT RENTALS	797	1,421	624	7,697
860001	OFFICE SUPPLIES	99	177	78	959
865001	POSTAGE, FREIGHT, ETC.	1,506	2,685	1,179	14,537
890001	REPRODUCTION	201	358	157	1,938
895001	SALARIES & WAGES	3,358	5,985	2,628	32,408
905001	SUBCONTRACTORS	1,045	1,862	818	10,083
935001	TELEPHONE & TELEGRAPH	996	1,775	779	9,610
950001	RAW MATERIALS	3,312	5,903	2,592	31,964
960001	DEPRECIATION	1,247	2,223	976	12,035

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Figure 3-5. Marked Text

## Edit Menu Options

The following **Edit** menu options are available to create flexible marks for scripting and data export functions:

- **Drop Anchor**
- **Mark Anchor to Caret**

These options are often used in conjunction with the **Find** option to mark specific text. They are most useful for marking text in reports where the format may change from version to version, and for creating marks based on specific text items. For a more detailed discussion

of these options, see "Edit Menu Functions" in Chapter 7.

These are powerful tools that can be used in a variety of situations and reports. The following procedure sets forth the essential steps required to create a mark:

1. Search for text near the starting point of the text you want to mark. Place the mouse cursor at the top left corner of the text you wish to mark. Click the right mouse button to display the context menu. Select **Set Caret** to place the caret at that position.
2. Open the **Edit** menu and select **Drop Anchor**. A symbol shaped like a backward "L" appears at the caret position.  
  
**Note:** You can also drop the anchor by clicking the right mouse button and selecting **Drop Anchor** from the context menu.
3. Search for text near the end of the text you want to mark. Place the mouse cursor at the bottom right corner of the text you wish to mark. Click the right mouse button and select **Set Caret** from the context menu to place the caret at that position.
4. Open the **Edit** menu and select **Mark Anchor to Caret**. All the text between the anchor and the current caret position is marked.
5. To remove the anchor from the view, open the **Edit** menu and select **Raise Anchor**. This removes the anchor, but leaves the block of text marked.

For procedures that use these options, see "Creating Flexible and Dynamic Marks" in Chapter 7.

## Removing Marks

To remove marks from text, do one of the following:

- Click the left mouse button anywhere in the active window.
- Open the **Edit** menu and choose **Undo Mark**. **Undo Mark** is available only if marking text was the last operation performed.
- Open the **View** menu and choose **Clear View**. **Clear View** also removes freezes, restores hidden text, and undoes moves and copies.

## Freezing Rows and Columns

---

Freezing rows and columns causes them to remain displayed in a fixed position while associated report data scrolls. For example, you can freeze column and row headings so they remain displayed while you scroll through the rest of the report.

When you freeze rows and scroll up and down, the data above and below the frozen rows scrolls while the frozen rows remain in place. When you freeze columns and scroll right and left, the data to the left and right of the frozen columns scrolls while the frozen columns

## Rearrange before Freezing

Although you can move, copy, and hide text after freezing rows and columns, you may find it easier to rearrange the view before freezing text.

It is usually a good idea to freeze text at the top and left of the screen. If you freeze rows or columns in the middle of the display, they do not scroll to the top or edge of the window, but remain in the position where they are frozen.

You can move, copy, or hide frozen text, but not at the same time as text that is not frozen. Thus, if you freeze text, then decide to hide columns that include the frozen text, you must hide the frozen text in a separate operation from hiding unfrozen text in those columns. You cannot search for frozen text with the **Find** option.

## Freezing Text

To freeze text, perform the following steps:

1. Position the text you want to freeze at the top and left of the viewing window.
2. Do one of the following:
  - Mark a portion of the rows or columns you need to freeze by using the mouse. This is the easiest method, because **Freeze** automatically extends marks to page boundaries.
  - Mark all text with the mouse.
  - Select text using the **From/To** options in the Freeze dialog, as described in step 3.
3. Pull down the **View** menu and choose **Freeze**. The Freeze dialog appears, as shown in Figure 3-6.

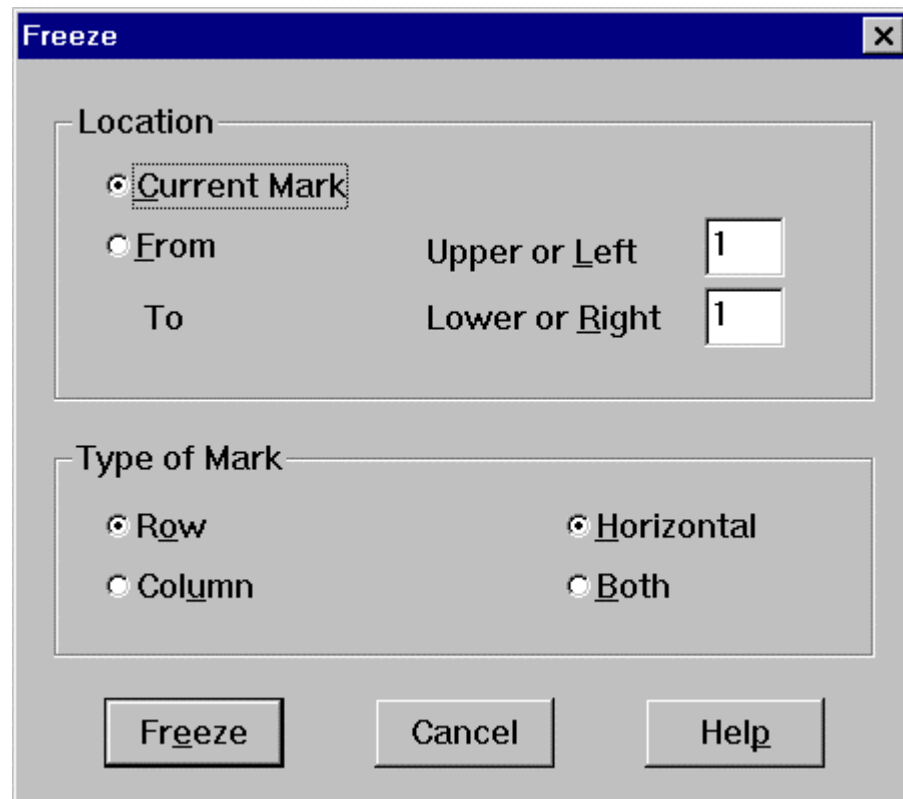


Figure 3-6. The Freeze Dialog

Field	Description
<b>Location</b>	
Current Mark	Freeze text already marked.
From	Specify the rows/columns you want to freeze.
Upper or Left	Starting row or column number for the freeze.
To...Lower or Right	Ending row or column number for the freeze. Together, From and To define the first and last rows or columns to be frozen. All the rows or columns between the Upper or Left and the Lower or Right positions freeze.
<b>Type of Mark</b>	
Row	Freeze rows.
Column	Freeze columns.
Horizontal	Frozen text scrolls left and right, but not up and down. This option is displayed only if Row is selected.
Vertical	Frozen text scrolls up and down, but not left and right. This option is displayed only if Column is selected.
Both	Frozen text does not scroll.

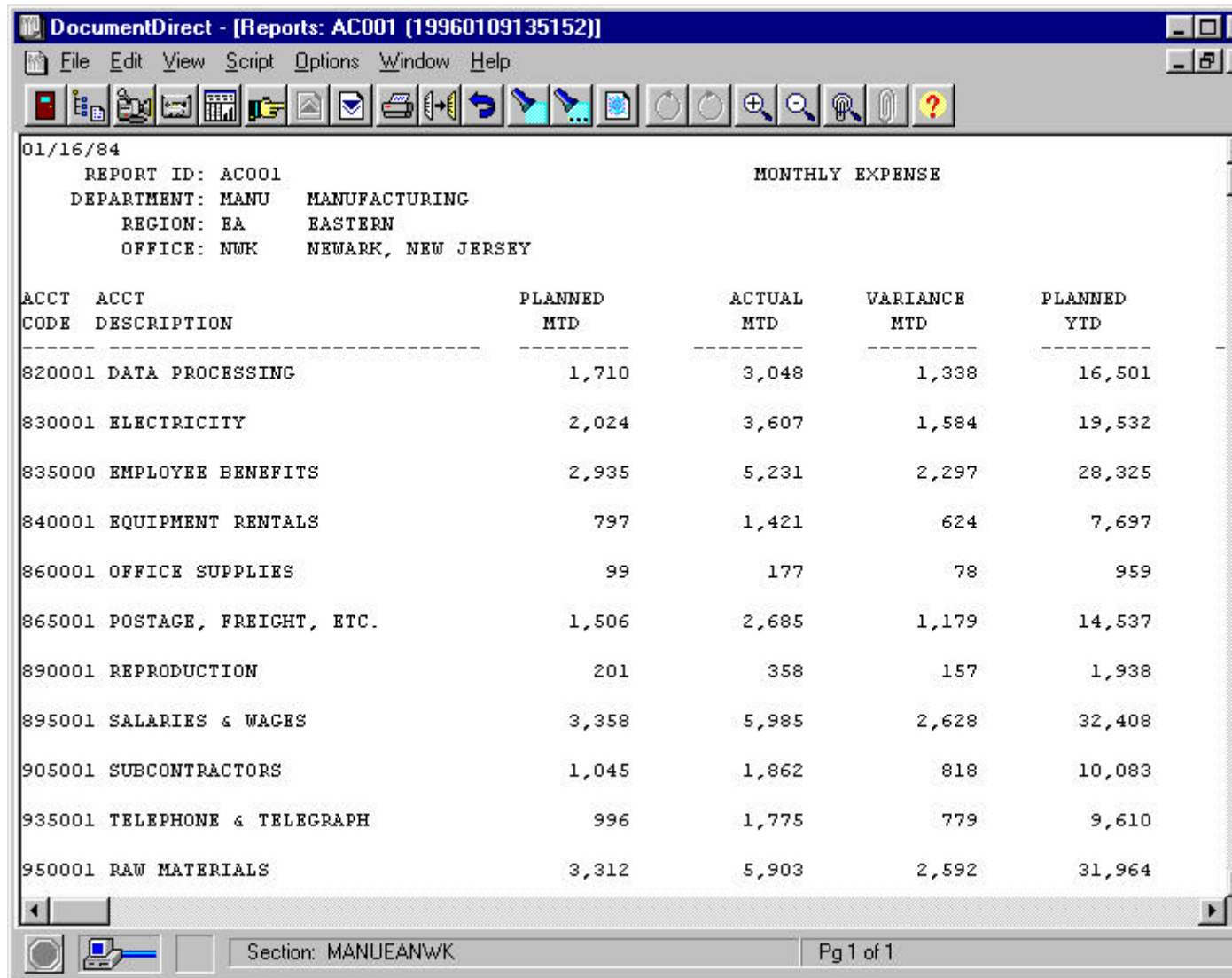
Freeze

Execute the freeze.

## Freeze Illustration

A typical freeze is illustrated in Figure 3-7. The sequence of screens shows the results of the following actions:

1. Locating column headings to freeze.
2. Scrolling to place the desired rows at the top of the display, and marking three rows with the mouse. Note that only a portion of the rows is selected.
3. Choosing **Current Mark** and **Row** in the Freeze dialog. The freeze extends automatically across all columns in the selected rows.
4. Pressing the **Page Down** key to show that the rows remain displayed.



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ACCT CODE	ACCT DESCRIPTION	PLANNED MTD	ACTUAL MTD	VARIANCE MTD	PLANNED YTD
820001	DATA PROCESSING	1,710	3,048	1,338	16,501
830001	ELECTRICITY	2,024	3,607	1,584	19,532
835000	EMPLOYEE BENEFITS	2,935	5,231	2,297	28,325
840001	EQUIPMENT RENTALS	797	1,421	624	7,697
860001	OFFICE SUPPLIES	99	177	78	959
865001	POSTAGE, FREIGHT, ETC.	1,506	2,685	1,179	14,537
890001	REPRODUCTION	201	358	157	1,938
895001	SALARIES & WAGES	3,358	5,985	2,628	32,408
905001	SUBCONTRACTORS	1,045	1,862	818	10,083
935001	TELEPHONE & TELEGRAPH	996	1,775	779	9,610
950001	RAW MATERIALS	3,312	5,903	2,592	31,964

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## Step 2



Column heads scrolled to top of view. Three rows selected by dragging mouse.

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ACCT CODE	ACCT DESCRIPTION	PLANNED MTD	ACTUAL MTD	VARIANCE MTD	PLANNED YTD
820001	DATA PROCESSING	1,710	3,048	1,338	16,501
830001	ELECTRICITY	2,024	3,607	1,584	19,532
835000	EMPLOYEE BENEFITS	2,935	5,231	2,297	28,328
840001	EQUIPMENT RENTALS	797	1,421	624	7,697
860001	OFFICE SUPPLIES	99	177	78	958
865001	POSTAGE, FREIGHT, ETC.	1,506	2,685	1,179	14,537
890001	REPRODUCTION	201	358	157	1,938
895001	SALARIES & WAGES	3,358	5,985	2,628	32,408
905001	SUBCONTRACTORS	1,045	1,862	818	10,083
935001	TELEPHONE & TELEGRAPH	996	1,775	779	9,610
950001	RAW MATERIALS	3,312	5,903	2,592	31,964

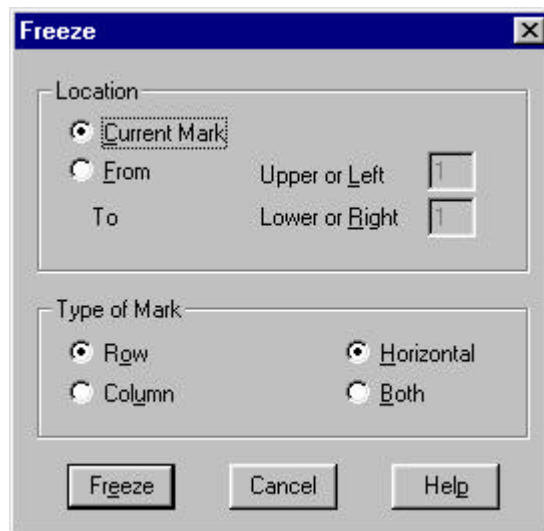
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Figure 3-7. Typical Freeze Illustrated (1 of 2)

## Step 3

←

Complete Freeze dialog.




Step 4

←

Frozen rows remain at top of window while scrolling through the report.

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File Edit View Script Options Window Help



895001	SALARIES & WAGES	3,358	5,985	2,628	32,408
905001	SUBCONTRACTORS	1,045	1,862	818	10,083
935001	TELEPHONE & TELEGRAPH	996	1,775	779	9,610
ACCT CODE	ACCT DESCRIPTION	PLANNED MTD	ACTUAL MTD	VARIANCE MTD	PLANNED YTD
950001	RAW MATERIALS	3,312	5,903	2,592	31,964
960001	DEPRECIATION	1,247	2,223	976	12,035
970001	MACHINE TOOL CONSUMABLES	917	1,635	718	8,851
980001	RENT	1,055	1,881	826	10,188
	OFFICE TOTAL:	21,200	37,791	16,591	204,626

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Figure 3-7. Typical Freeze Illustrated (2 of 2)

## Moving or Copying Text

**Move** and **Copy** allow you to change the position of displayed text. The only difference between **Move** and **Copy** is that moved text disappears from its original position and appears at the place you specify. Copied text appears both in its original position and at the location you specify.

Suppose, for example, you want to compare the data in two report columns at opposite sides of a report. **Move** and **Copy** allow you to set the columns side by side for easy comparison. An example of how to do this is shown later in this section.

To move or copy text, you must specify:

- Rows or columns to be moved or copied

- Position to which the text is moved or copied

## Selecting Text to Move or Copy

You can specify the text to move or copy in either of two ways:

- Mark text with the mouse. This is the easiest method, because the **Move** and **Copy** dialogs allow you to extend the mark to the appropriate page boundaries.

For example, suppose you mark ten columns of text in two rows. If you extend that mark to the bottom of the page, all rows in those ten columns from the top of the mark to the bottom of the page are selected. If you extend to the right edge, all columns in the two rows from the leftmost edge of the mark to the right edge of the page are selected.

- Open the **Move** or **Copy** dialog and specify the following:
  - ◆ Row or column where mark should start
  - ◆ Width and height of marked text
  - ◆ Directions to extend the mark

## Specify Where to Put Moved or Copied Text

You can specify the position to which text moves or is copied in either of the following two ways:

- Point with the mouse cursor at the point where the top left corner of the selected text should appear. Click the right mouse button and select **Set Caret** from the context menu to place the caret at that location. The upper left corner of moved or copied text appears at the caret position.
- In the **Move To** or **Copy To** dialog, specify the row and column number at which you want the upper left corner of moved or copied text to appear.

## Easiest Method

The easiest way to move or copy text is to:

1. Mark with the mouse all text to be moved or copied.
2. Position the mouse cursor where you want the upper left corner of the text to appear. Click the right mouse button and select **Set Caret** from the context menu to place the caret at that position.
3. Pull down the **View** menu and choose **Move** or **Copy**.
4. In the **Extend Mark to Page Boundaries** fields, specify the directions, if any, in which to extend the mark. You can extend the mark in more than one direction.

- 5. Open the positioning dialog by choosing the **Move To...** or **Copy To...** button.
- 6. Complete the action by choosing the **Move** or **Copy** button.

Move and Copy Dialogs

When you pull down the **View** menu and choose **Move**, the Move dialog shown in the left half of Figure 3-8 appears. When you choose the **Copy** option, the Copy dialog shown in the right half of Figure 3-8 appears.

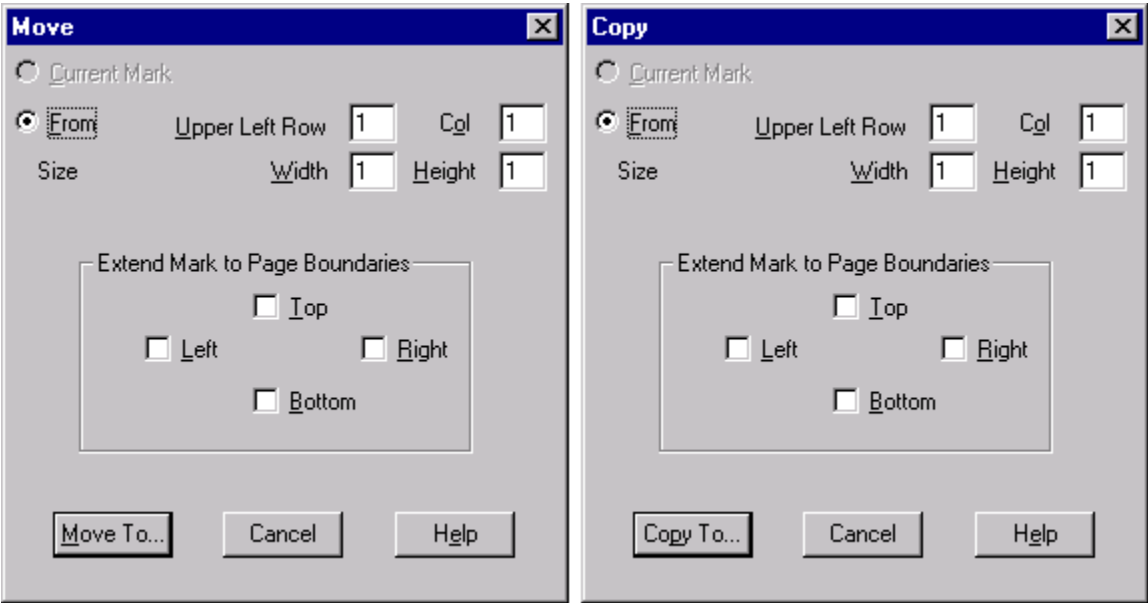


Figure 3-8. The Move and Copy Dialogs

Field	Description
Current Mark	Move or copy text you already marked.
From	Specify the rows or columns you want to move or copy.
Upper Left Row	Number of the uppermost row you want to move or copy.
Col	Number of the leftmost column you want to move or copy.
Size: Width	Number of columns you want to move or copy.
Height	Number of rows you want to move or copy.

Extend Mark to Page Boundaries	Choose as many of the following as you need. <b>Top</b> extends the mark to the top of the page. <b>Left</b> extends the mark to the left edge of the page. <b>Right</b> extends the mark to the right edge of the page. <b>Bottom</b> extends the mark to the bottom of the page.
Move To... Copy To...	Display the Move To and Copy To dialogs shown in Figure 3-9.

### Move To and Copy To Dialogs

The Move To and Copy To dialogs, shown in Figure 3-9, allow you to complete move or copy actions.

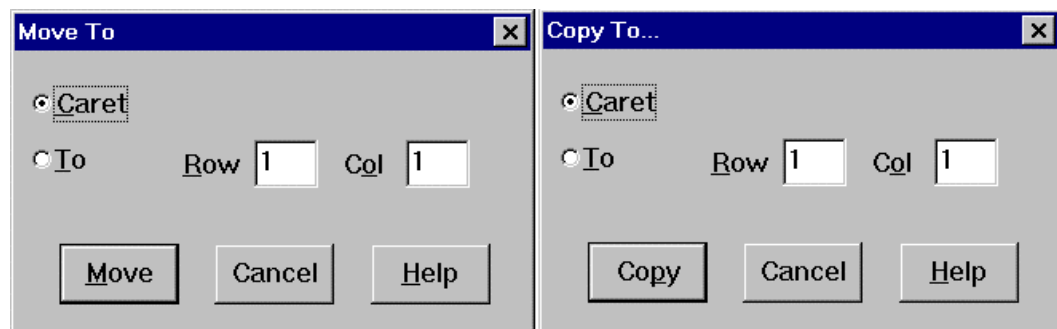


Figure 3-9. The Move To and Copy To Dialogs

Field	Description
Caret	Move or copy text to the caret position. Use this option only if you placed the caret at the point where you want the moved or copied text to appear.
To	Specify the place where you want the moved or copied text to appear.
Row	Row number where the top row of the moved or copied text should appear.
Col	Column number where the leftmost column of the moved or copied text should appear.
Move/Copy	Execute the move or copy.

### Move Illustration

The four screens shown in Figure 3-10 illustrate a typical move. They show the results of the following actions:

1. Selecting a column to move.
2. Extending the mark to the bottom of the page.
3. Selecting **Caret**.
4. Executing the move.

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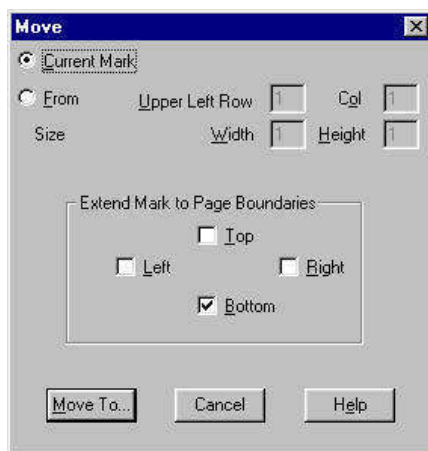
ACCT CODE	ACCT DESCRIPTION	PLANNED MTD	ACTUAL MTD	VARIANCE MTD	PLAN YTD
820001	DATA PROCESSING	1,710	3,048	1,338	1
830001	ELECTRICITY	2,024	3,607	1,584	1
835000	EMPLOYEE BENEFITS	2,935	5,231	2,297	2
840001	EQUIPMENT RENTALS	797	1,421	624	
860001	OFFICE SUPPLIES	99	177	78	
865001	POSTAGE, FREIGHT, ETC.	1,506	2,685	1,179	1
890001	REPRODUCTION	201	358	157	
895001	SALARIES & WAGES	3,358	5,985	2,628	3
905001	SUBCONTRACTORS	1,045	1,862	818	1
935001	TELEPHONE & TELEGRAPH	996	1,775	779	
950001	RAW MATERIALS	3,312	5,903	2,592	3

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Step 1



PLANNED MTD column is marked. Caret is placed next to VARIANCE MTD.

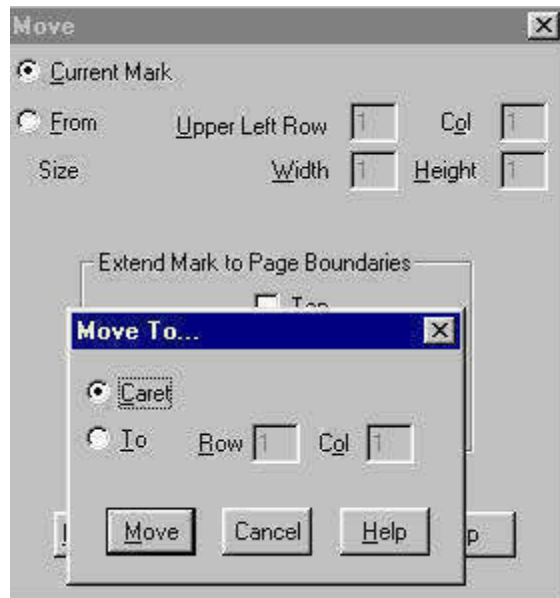


Step 2



**Current mark** specified. Mark extended to bottom of page.

Figure 3-10. Setting up a Move or Copy (1 of 2)



Step 3



Select **Caret** in Move To dialog.

ACCT CODE	ACCT DESCRIPTION	ACTUAL MTD	VARIANCE MTD	PLANNED YTD	ACTU YTD
820001	DATA PROCESSING	3,048	1,710	1,338	16
830001	ELECTRICITY	3,607	2,024	1,584	19
835000	EMPLOYER BENEFITS	5,231	2,935	2,297	28
840001	EQUIPMENT RENTALS	1,421	797	624	7
860001	OFFICE SUPPLIES	177	99	78	
865001	POSTAGE, FREIGHT, ETC.	2,685	1,506	1,179	14
890001	REPRODUCTION	358	201	157	1
895001	SALARIES & WAGES	5,985	3,358	2,628	32
905001	SUBCONTRACTORS	1,862	1,045	818	10
935001	TELEPHONE & TELEGRAPH	1,775	996	779	9
950001	RAW MATERIALS	5,903		2,592	31

Step 4



Moved text appears at caret position. PLANNED MTD and VARIANCE MTD are now side by side.

Figure 3-10. Setting up a Move or Copy (2 of 2)







### *Hiding Text*

---

Another way to enhance your view of a report is to hide text. Hidden text simply disappears; it is not placed elsewhere in the display. Surrounding text fills the gap left by the hidden text. If hidden text is part of a freeze, surrounding text that is not frozen does not close in to fill the space occupied by the hidden text.

Suppose, for example, you want to compare two columns at opposite sides of a report. The **Hide** option allows you to remove all the text separating the two columns, setting them side by side for easy comparison. To hide text, two options are available, as described in the following two sections.

### Standard Method for Hiding Text

To hide text using the standard method, perform the following steps:

1. With the mouse, mark the text you want to hide.
2. Pull down the **View** menu and select **Hide**. The Hide dialog, shown in Figure 3-11, is displayed with the **Current Mark** button selected.
3. If you wish to extend the mark, specify the directions in the **Extend Mark to Page Boundaries** fields. You can extend the mark in more than one direction.
4. Click **Hide** to complete the operation.

### Alternative Method for Hiding Text

To hide text using the alternative method, perform the following steps:

1. Pull down the **View** menu and select **Hide**. The Hide dialog, shown in Figure 3-11, is displayed with the **From** button selected.
2. Do of the following:
  - In the **Upper Left Row** and **Col** boxes, enter the row and column numbers of the upper left corner of the block of text to be hidden.
  - In the **Size Width** and **Height** boxes, enter the width and height of the block of text to be hidden.
  - In the **Extend Mark to Page Boundaries** boxes, specify the direction(s), if any, in which to extend the mark. You can extend the mark in more than one direction.
3. Click **Hide** to complete the operation.

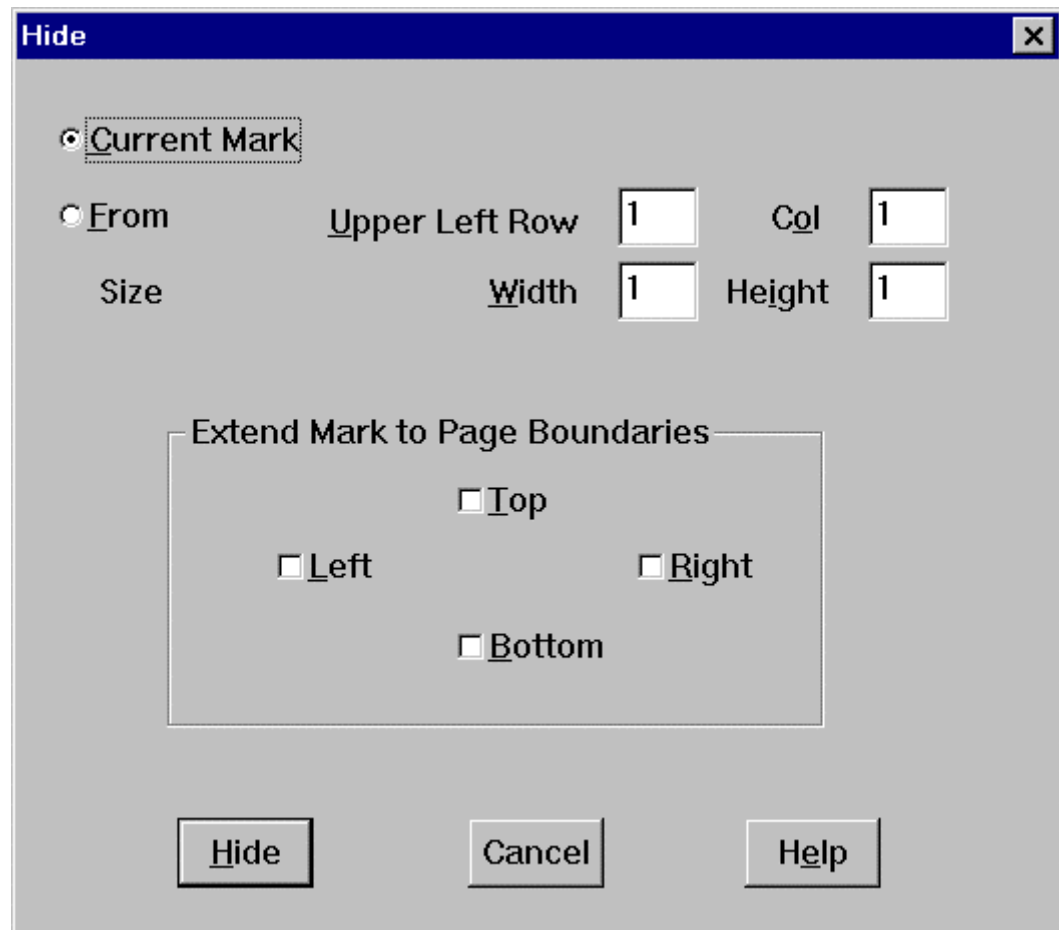


Figure 3-11. The Hide Dialog

Field	Description
Current Mark	Hide rows and columns you already marked.
From	Specify the rows and columns you want to hide.
Upper Left Row	Number of the uppermost row you want to hide.
Col	Number of the leftmost column you want to hide.
Size: Width	Number of columns you want to hide.
Height	Number of rows you want to hide.

Field	Description
Extend Mark to Page Boundaries	Choose as many of the following as you need. <b>Top</b> extends the mark to the top of the page. <b>Left</b> extends the mark to the left edge of the page. <b>Right</b> extends the mark to the right edge of the page. <b>Bottom</b> extends the mark to the bottom of the page.
Hide	Execute the hide.

### ***Modifying the View of Image Documents***

---

In addition to modifying the views of image documents with the **Freeze**, **Copy**, **Move**, and **Hide** options explained in the previous sections, you can:

- Use the **Color Depth** option to increase the color depth of the image before scaling it, thereby improving the clarity of the resized image.
- Use the **Fit Paper**, **Scale %**, **Actual Size**, and **Custom Size** options to display image documents in varying sizes.
- Rotate images for easier viewing.
- Switch between individual and compound page views when viewing multi-page TIF and IOCA images.

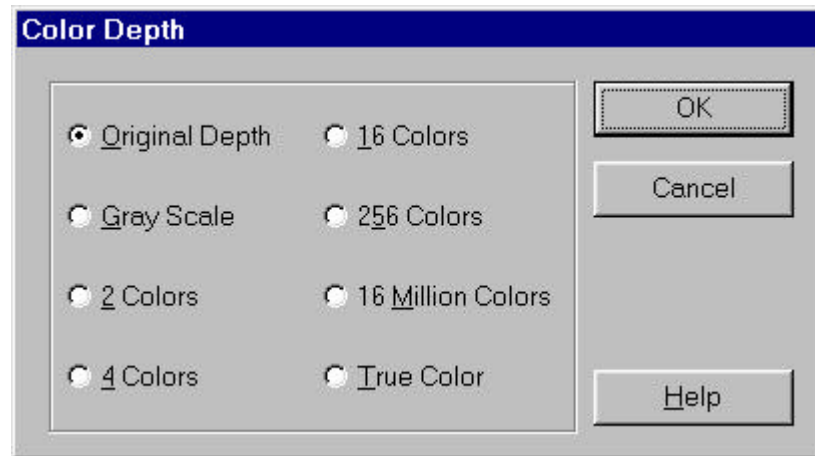
Note that the **Find**, **Font**, and **Export** options are not enabled for image documents.

### **Adjusting Image Color Depth**

Resizing images that contain text to a scaling value other than 100% may decrease the clarity of the text, particularly in images comprised of 16 or fewer colors. Before scaling images to a value other than 100%, increase the color depth, generally to 256 colors or to gray scale for black-and-white images. Higher color values increase the amount of time and memory required to process the image. You cannot adjust image color depth in LPFD images.

To adjust the color depth of an image report, perform the following steps:

1. Open the image document you want to view.
2. Select **Color Depth** from the View menu. The following dialog is displayed.



3. Select the number of colors in which to view this image as follows:

Selection	Description
Original Depth	Use the original number of colors stored in the image
Gray Scale	Use 256 shades of gray
2, 4, 16, 256, 16 million colors	Use the number of colors specified in the selection
True Color	Use all colors available on your machine

Your selection affects the current report. If you want to retain a setting for all opened images, set the color depth on the Image Viewing Options tab of the Preferences dialog.

## Resizing Images

When you open images, they are sized according to the scaling values set on the Image Viewing tab of the Preferences dialog. Subsequent pages containing image data are sized based on the scaling value set for the current window. You may need to increase or decrease image display size for easy viewing. Note that if the image document contains text and you are going to resize it to a scaling value other than 100%, you may need to adjust the color depth before resizing to avoid distorted text. See "Adjusting Image Color Depth" in this chapter. DocumentDirect offers two options for resizing images:

- You can enlarge or shrink the view as needed.
- You can format the view to fit the printable area of the paper for which it was designed.

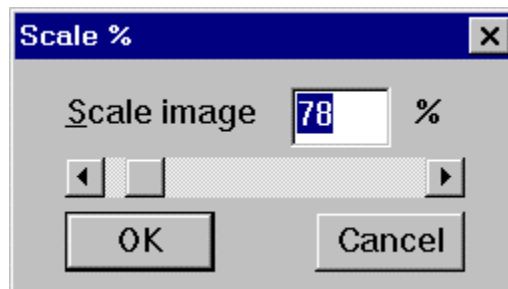
To change the displayed size of an image, do the following:

1. Open the image document you want to view. For instructions, see Chapter 2. Reorient the view, if necessary, as described in the preceding procedure.

2. Open the **View** menu and select one of the following:

- To make the image fit your display, select **Fit Width** or **Fit Height**.
- To display the image in the paper size format for which it was designed, select **Fit Paper**. The displayed image resizes to fit the printable area of the selected paper size.
- To increase or decrease the size of the image, select **Scale %...**. The Scale % dialog is displayed, as shown in Figure 3-12. Do one of the following:
  - ◆ In the **Scale image** field, type in the percentage to which you want to increase or decrease the image size. For example, scaling to 150% increases the image size by 50%.
  - ◆ Click the button bar arrows to increase or decrease the image size as desired.
  - ◆ Click and drag the button. Image size percentage increases or decreases accordingly.

Click **OK**. The image is displayed in the requested scaling.



*Figure 3-12. The Scale % Dialog*

- To display the image in its original dimensions, select **Actual Size**. If the image contains information about its original dimensions, it resizes on the screen to its original size; otherwise, the image scales to 100%.
- To specify the image size, select **Custom Size...**. The Custom Display Size dialog is displayed, as shown in Figure 3-13. In the **Display Size** fields, specify the dimensions in which you want the image to display. In the **Units** fields, specify the unit of measurement by which the image should be measured. When the settings suit your needs, click **OK**.



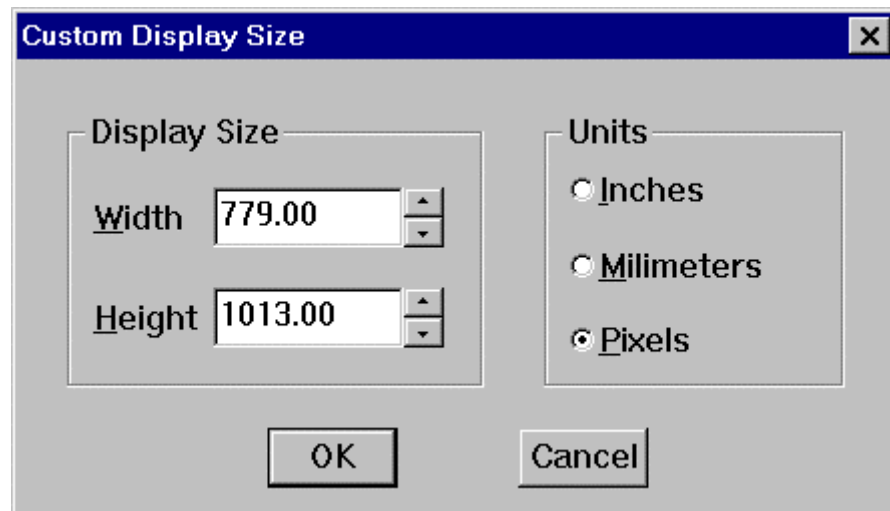


Figure 3-13. The Custom Display Size Dialog

## Rotating Images

At times, image data is stored in a format that displays in an inconvenient manner, such as sideways or upside-down. In such cases, DocumentDirect allows you to rotate the image for easier viewing.

To rotate a displayed image, do the following:

1. Open the image document you want to view. For instructions, see Chapter 2.
2. Open the **View** menu and select the appropriate Rotation setting. Four rotation settings are available:
  - **0**: Display image in its original orientation.
  - **90**: Rotate image counter-clockwise 90 degrees from its original orientation.
  - **180**: Rotate image counter-clockwise 180 degrees from its original orientation.
  - **270**: Rotate image counter-clockwise 270 degrees from its original orientation.

## Switching between Individual and Compound Page Views

When displaying a multi-page TIF or IOCA image, you can combine all of its sub-pages into a single page, called a compound page, or view sub-pages as individual pages. To switch from compound page view to individual page view or vice-versa, do the following:

1. Open the image document you want to view. For instructions, see Chapter 2.
2. Open the **View** menu and select or deselect **Compound Page**.

## ***Viewing Laser Printer Formatted Documents***

---

You can view Laser Printer Formatted Documents (LPFDs) as you would any other image file. Examples of LPFDs include the following:

- Adobe PostScript
- Adobe PDF
- Hewlett-Packard PCL
- IBM AFP
- Xerox DJDE/Metacode

If you work with LPFDs, see "Modifying Image Document Views," earlier in this chapter, for information on all the available viewing options.

Normally you should have access to the directories where LPFD resources are located. If you do not, DocumentDirect cannot download formatting instructions to its own resource files. This results in slower access to LPFD documents. For information on how to configure DocumentDirect for viewing LPFD images, see Chapter C3 and "Setting User Preferences" in Chapter C1.

## ***Clearing the View***

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To clear all marks and restore the view to its original state, open the **View** menu and choose **Clear View**.

## ***Annotating Documents***

---

You can attach annotations – text, graphics, and audio files – to text or image documents. For example, annotations can be:

- Text and "sticky notes"
- Lines, pointers, and shapes
- Highlight bars
- Measurement lines (called rulers)
- Images, in the form of BMP files

- Audio files, in the form of WAV files

Figure 3-14 illustrates a sample annotated page.

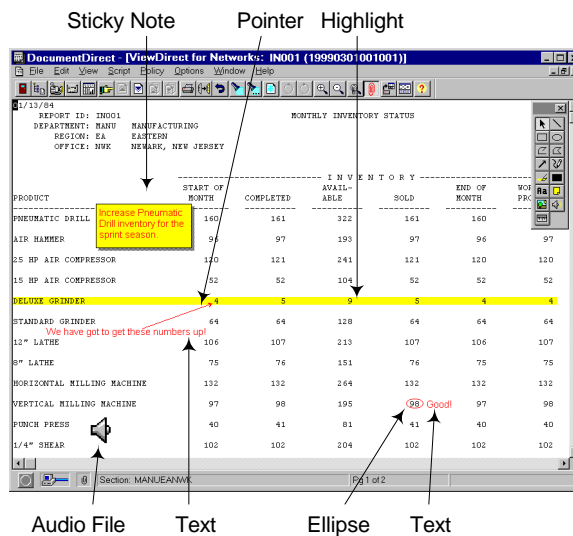


Figure 3-14. Sample Annotated Page

Anyone viewing a document can display the annotations attached to it. However, only the person who created an annotation can edit or delete it. Only one person at a time can annotate a page.

The Mobius database, where annotations are stored, must be set up before you can annotate. For details, refer to Appendix D. Note that annotations remain attached to their documents no matter where the report archive is migrated.

## Creating or Editing Annotations

To create or edit annotations, perform the following steps:

1. Open the Document Explorer, locate the document and open the desired page. Click the Edit Annotation button on the DocumentDirect toolbar:



The Annotation toolbox is displayed as shown in Figure 3-15:

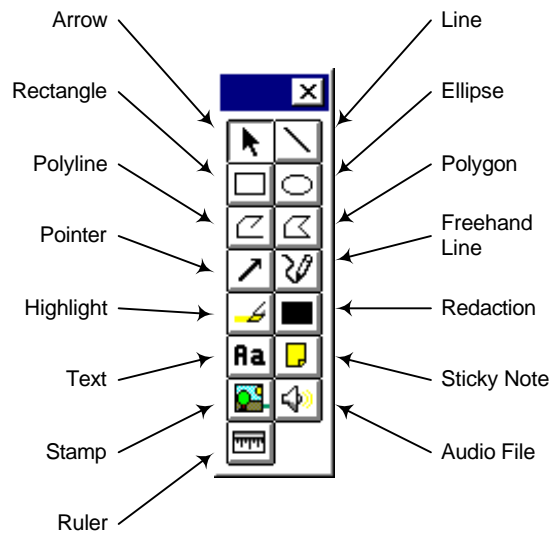


Figure 3-15. The Annotation Toolbox

2. Click the desired button on the Annotation toolbox. For information on each of the toolbox buttons, see "Annotation Toolbox Buttons."
3. Place the cursor at the point you want to insert the annotation. Click and drag the cursor to size the annotation as desired. You can resize an annotation by selecting it and dragging one or more selection handles.

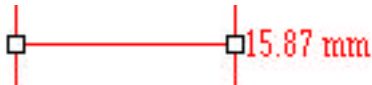
To change the properties of an annotation tool, right-click the annotation to display a context menu and select the Properties menu option. The properties dialog lets you change properties such as font size for text annotations and line width for line annotations.

4. Close the document window to save the annotations.

## Annotation Toolbox Buttons

The following describes each of the Annotation Toolbox buttons.

Button	Description
Arrow	Selects an existing annotation in order to edit or delete it.
Audio File	Attaches a WAV file.
Ellipse	Draws an ellipse.
Freehand Line	Draws a line.
Highlight	Draws a transparent color over the portion of the report that you select.
Line	Draws a straight line in any direction.

Button	Description
Pointer	Draws an arrow.
Polygon	Draws a sequence of connected line segments. A line between the first point and the last point is automatically added to close the polygon.
Polyline	Draws a sequence of connected line segments.
Rectangle	Draws a rectangle.
Redaction	Draws a rectangle filled with a chosen color.
Ruler	<p>Draws a line that measures items on a report page.</p> <p>Select <b>Default Properties</b> from the context menu. A secondary menu is displayed. Select <b>Ruler</b>. The Ruler dialog is displayed. Select the properties of the measurement line as described below:</p> <p>Measurement Units      Unit of measurement to be used.</p> <p>Unit Abbreviation      Abbreviation for the unit of measurement. It is displayed to the right of the measurement.</p> <p>Precision      Number of decimal places in the measurement.</p> <p>Gauge Length      Height of the upright bars at each end of the measurement line.</p> <p>The following is a sample measurement line:</p> 
Stamp	Attaches a BMP file.
Sticky Note	Attaches a note with a background color. Initially contains the text string AaBbYyZz, which is selected. Enter your text in place of this string, then click outside the note to complete the entry.
Text	<p>Adds a text annotation. Initially contains the text string AaBbYyZz, which is selected. Enter your text in place of this string, then click outside the text annotation to complete the entry.</p> <p>If you want text to be displayed in annotations when documents are rotated, use True-Type fonts.</p>

Each button in the toolbox displays its type (Ruler, Stamp, etc.) when you move the mouse pointer across it.

## Layering Annotations

If annotations overlap, select the one you want to "Send to Back" or "Bring to Front." Right-clicking the mouse on an annotation in Edit mode accesses these properties. Note that these properties are enabled only when two or more annotations overlap in Edit mode.

## Canceling Changes to or Deleting Annotations

While editing annotations you can do the following:

- Cancel all changes made to annotations in the current session. Go to the DocumentDirect menu and select **View|Annotations** then **Cancel changes**.
- Select an individual annotation to delete. Right click to highlight it and display the context menu. Select **Delete**.

## Displaying Annotations

Settings on the Annotations tab of the Preferences dialog (**Options|Preferences**) control whether:

- The Paper Clip icon appears in the Document Explorer window next to documents containing annotations and whether the Paper Clip icon appears on the status bar when the current open page contains annotations (the default is Yes)
- Annotations are displayed automatically when you open a document page that contains annotations (the default is No)

For details, refer to "Annotations Options" in Chapter C1.

The following instructions assume the default annotation settings are in effect. To display annotations attached to a document page, perform the following steps:

1. Open the Document Explorer and locate the desired document. Annotated documents are identified by a Paper Clip icon appearing next to the Report Version ID, Report Section ID, Topic Report Version ID, or Topic Entry ID. Open the document and go to the desired page.
2. Click the Display Annotation button on the DocumentDirect toolbar:



All annotations attached to the page are displayed. To hear an audio annotation, double-click the Speaker icon.

3. You can display details for a selected annotation. Right click the annotation to display the context menu and select **Annotation Details**. The Annotation Details window is displayed as shown in Figure 3-16.

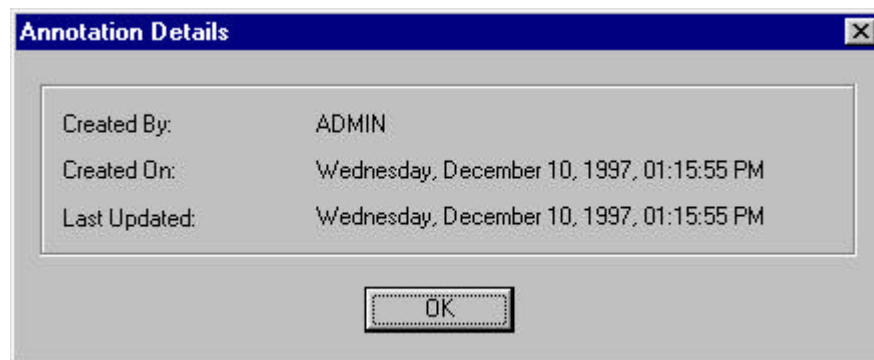


Figure 3-16. The Annotation Details Window

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## Chapter 4. Printing Documents

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### Introduction

This chapter tells you how to print a displayed document and how to change printers for DocumentDirect. See your *Microsoft Windows User's Guide* for detailed information on setting up printers.

### Contents

- Printing a Document
  - Background Printing
- Changing Printers

---

### *Printing a Document*

---

You can print any document that you can display in DocumentDirect. If you moved or copied text, DocumentDirect prints the rearranged view, although the effects of freezing text are ignored. When you display a document using a TrueType font, DocumentDirect prints it exactly as it appears on the screen. TrueType fonts appear in the Font dialog with a "TT" icon next to the font name, as shown in the following sample:

**T Times New Roman**

To print a document:

1. Open the Document Explorer and display the desired document.
2. Select **File|Print**. The Print dialog is displayed, as shown in Figure 4-1.

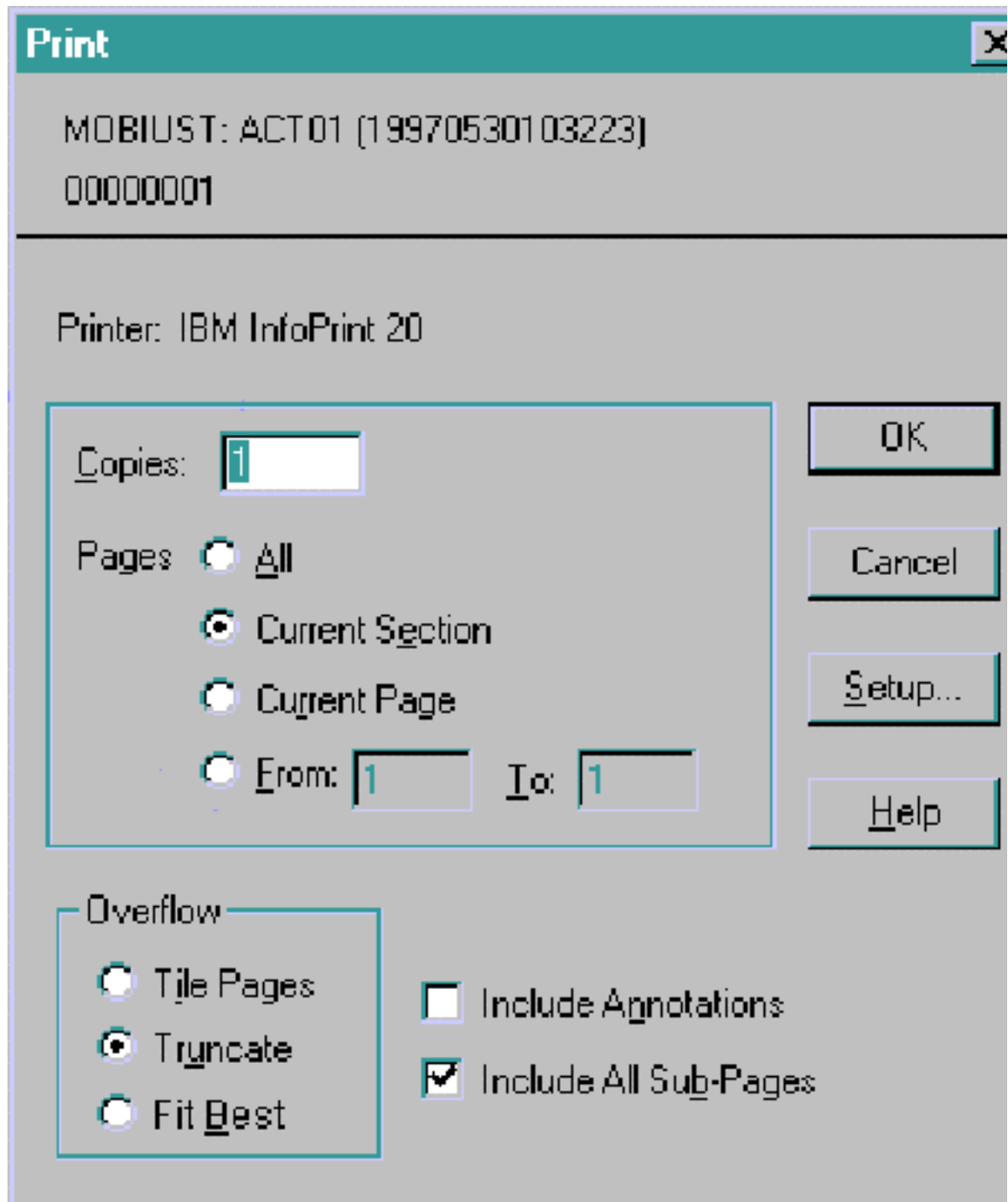




Figure 4-1. The Print Dialog

3. Select the desired options. Each option is explained in the table below.

Option	Description
Copies	Controls the number of copies printed.
All	Print all pages of the document.
Current Section	Print all pages of the current section.
Current Page	Print the current page, compound page or subpage.
From	The number, relative to page 1 of the current section, of the first page you want to print.
To	The number, relative to page 1 of the current section, of the last page you want to print.
Tile Pages	Print overflow text on successive pages that can then be "tiled" together to reproduce the document page.  For an illustration of printing using tiled pages, see Figure 4-2 and the accompanying text.
Truncate	Discard, i.e., do not print, overflow text
Fit Best	Scale the document to fit the printer paper. The report is scaled so that it fits as much of the printed page as possible.
Include Annotations	Print the document with all annotations that are attached to it.
Include All Sub-Pages	Print all sub-pages of a multi-page image. This option is only available when TIF, IOCA or AFP images are displayed in individual page view.  <b>Note:</b> When an individual sub-page is displayed and this option is <i>not</i> selected, only the correspondingly numbered sub-page of each requested page is printed. For example, if sub-page 2 of the current page is displayed and you request the Current Section to be printed, only sub-page 2 of each page in the current section is printed.

**Printing as Tiled Pages:** The shaded area in Figure 4-2 represents the document page. The four numbered squares represent the four physical pages on which the document page is printed. By "tiling" the printing pages together, you can reproduce the original document page. This is useful, for example, when printing banners that do not fit on a single page.



Figure 4-2. Example of Printing Overflow Data as Tiled Pages

4. Click **OK**. The specified pages or sub-pages print at the printer selected through the Print Setup dialog, shown in Figure 4-1.

## Background Printing

Background printing allows you to print a document and continue working in DocumentDirect while the document prints. DocumentDirect supports background printing only for the following types of documents:

- Documents opened from TCP/IP, network, or stand-alone document servers. See the section on managing document servers in Chapter C1 for more information about document server types.
- Documents opened from a local or network drive. See the section on opening documents in Chapter 2 for information about opening documents from a local or network drive.

The document types above will print in the background by default. To change the default, refer to the section on setting user preferences in Chapter C1.

### *Checking the Background Print Status*

To check the status of documents printing in the background, click the Printer Button on the status bar at the bottom of the DocumentDirect window. The Print Manager window, shown in Figure 4-3, appears.

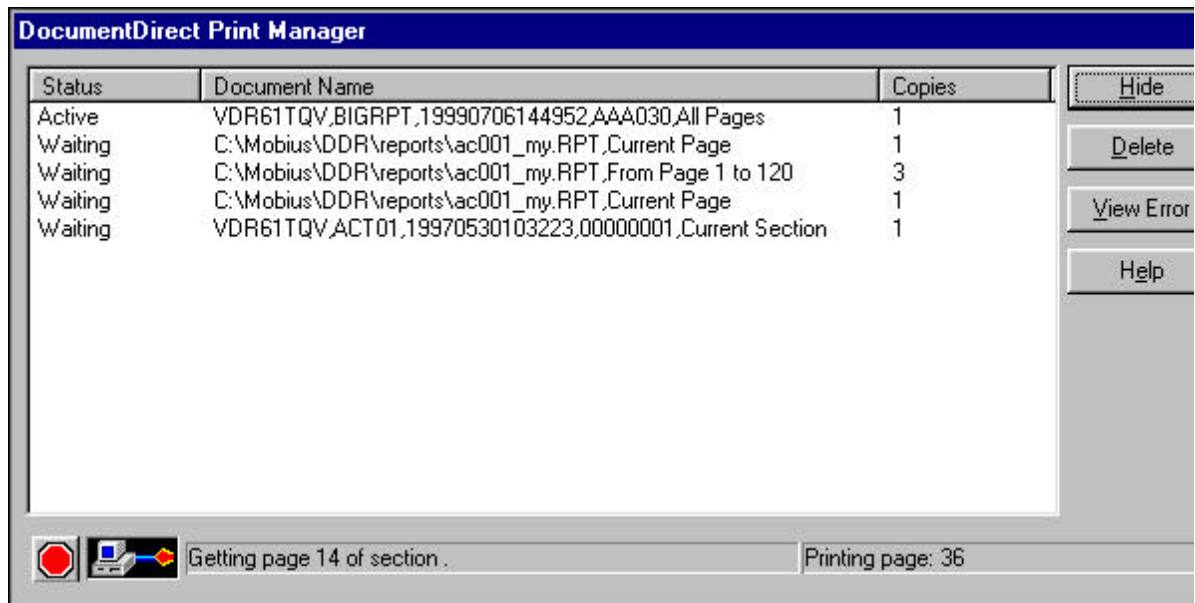


Figure 4-3. The Print Manager Window

The Print Manager window lists the document that is currently printing, any documents scheduled to print, and any documents that encountered an error while printing. These documents are assigned status codes of "Active," "Waiting," and "Error," respectively. When the entire active document prints, it is removed from the list in the Print Manager window. The left side of the status bar at the bottom of the window displays processing messages during printing. The right side of the status bar displays the number of pages of the active document that printed so far. The "Copies" column indicates the number of copies of each document to be printed. (This number was selected in the Print dialog.)

#### Canceling Background Print Processes

To stop a document from printing in the background either before it begins printing or while it is printing, follow these steps:

1. Open the Print Manager window.
2. Highlight the document you want to delete.
3. Click **Delete** to delete the document from the list. If the document is in the process of printing, it may continue to print until the printer's memory clears and then stop. If the document is waiting, it will not print.

#### Checking Background Printing Errors

You may encounter an error while printing a document in the background. To determine the source of the error, follow these steps:

1. Open the Print Manager window. The document with the error will show an "Error" status.

2. Highlight the document that shows an error.
3. Click **View Error** to open an error dialog that describes the source of the error.
4. Click **OK** to close the error dialog.
5. Click **Delete** to cancel printing. Documents with an "Error" status will continue to appear in the Print Manager window until you delete the job or close and re-start DocumentDirect.

After you correct the error, print the document again.

## Changing Printers

---

To change printers, perform the following steps:

1. Pull down the **File** menu and choose **Printer Setup**. A Print Setup dialog, similar to the one shown in Figure 4-4, is displayed. This dialog varies based on your installed printer driver.

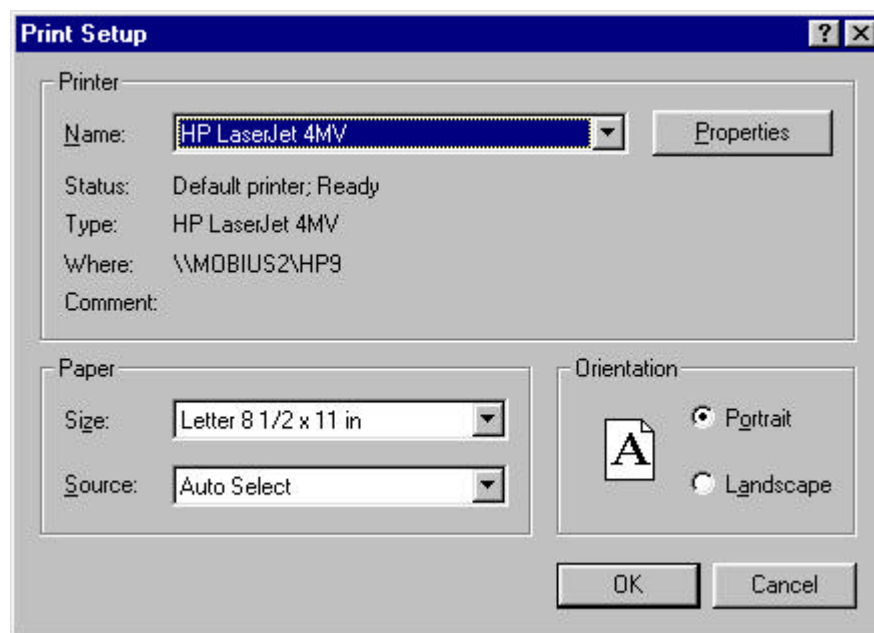


Figure 4-4. The Print Setup Dialog

2. Select the desired printer from the drop-down list in the Name field.

To set your printing options, click **Properties**. Set the available options to suit your preferences. To install another printer, see the *Microsoft Windows User's Guide* for details.

3. Click **OK**.

---

## Chapter 5. Scripts

---

### Introduction

This chapter tells you how to create scripts to automate repetitive actions.

### Contents

- Overview
- Recording Scripts
- Writing and Editing Scripts
  - Writing Scripts
  - Editing Scripts
- Using Annotation-Related Script Commands
- Executing Scripts
- Automating Scripts
  - Command Line Setup
  - Long Filenames
- Script Menu Functions
- Using the PROMPT Operand
  - Overview
  - Specifying Values for the PROMPT Operand
- Sending Scripts through E-mail
- Script Commands
  - Script Command Formatting Conventions

### Overview

---

A script is a sequence of actions to be performed by DocumentDirect, such as opening a document, searching for and exporting data, and printing document pages. You can create a script using either of the following methods:

- Record a script while working in DocumentDirect, as described in "Recording Scripts."
- Create a script file using a text editor, as described in "Writing and Editing Scripts."

After you create a script, you can run it any time while working in DocumentDirect. You can also set up DocumentDirect to run a script when DocumentDirect is started. For instructions on running a script at startup, see "Automating Scripts."

You can write scripts that prompt you for input. For example, a script can prompt you for the name of the document to open. For instructions on creating such a script, see "Using the PROMPT Operand."

Note that scripts can perform DocumentDirect functions only; they can not perform certain Windows manipulation functions, such as resizing.

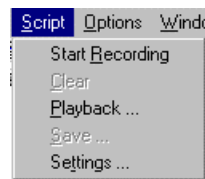
## ***Recording Scripts***

---

Scripts can help you perform repetitive or complex tasks quickly and accurately. While scripts can incorporate all the functions of DocumentDirect, several fundamental steps are involved in recording and playing back all scripts. The following procedure results in a script file that can be invoked at any time to repeat the recorded actions.

To record a script, perform the following steps:

1. Open the **Script** menu and select **Start Recording**.



*Figure 5-1. The Script Menu*

2. Perform the actions you want to record.

If you make mistakes in the process of recording a script, there is no need to start over again. Simply open the **Edit** menu and select **Undo** as many times as necessary to undo the errors. DocumentDirect ignores all undone steps when you save the script.

3. Open the **Script** menu and select **Stop Recording**.
4. Open the **Script** menu and select **Save Script**. The Write Script To File dialog is displayed, as shown in Figure 5-2.

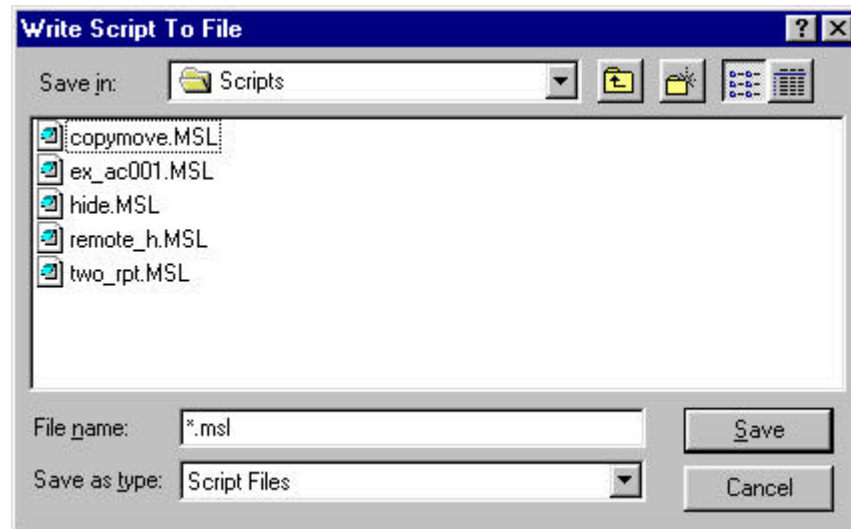


Figure 5-2. The Write Script to File Dialog

5. Do one of the following:
    - In the **File name** field, specify the path and filename for the script.
    - Select the destination drive and directory from the **Save in** menu, then specify the filename of the script.
- Notes:** 1) The Script Settings dialog lets you assign the default directory where scripts are stored. For details, see "Script Menu Functions."
- 2) When you create more than one script in a session, open the **Script** menu and select **Clear Script** before recording another script. For details, see "Script Menu Functions."

## Writing and Editing Scripts

---

Scripts are stored in ASCII text files that can be created and edited with a text editor, such as the Windows Notepad.

### Writing Scripts

To write a new script, perform the following steps:

1. Open a text editor, such as the Windows Notepad.
2. Write the script commands and parameters you want to execute. See "Script Commands" and "Script Command Formatting Conventions," later in this chapter for detailed descriptions of all script commands.
3. After you write the script as desired, save it in the directory in which you keep your script files, specified in the Working directory field of the Script Settings dialog. Once it is saved, the script can be executed like any other script.

## Editing Scripts

To edit a script file, perform the following steps:

1. Open a text editor, such as the Windows Notepad.
2. Open the script file you want to edit.
3. Edit the script commands and parameters as desired.
4. After you edit the script as desired, save it in the directory in which you keep your script files, specified in the Working directory field of the Script Settings dialog.

## *Using Annotation-Related Script Commands*

---

The following restrictions apply when recording, writing, or editing scripts that use annotation-related script commands:

- Image Reports:
  - ♦ If a script includes both changing the scale of an image report and adding annotations, the script should change the scale of the image report *before* adding annotations to ensure that the annotations are attached in the proper location.
  - ♦ If a script includes both rotating the image report and adding annotations, the script should rotate the image report *before* adding annotations to ensure that the attached annotations are positioned properly.
- When you create annotations manually or by using **Script | Playback** to run a script, the annotations are automatically saved when you leave or print the current page of the report.
- When you record a script that includes creating annotations, the annotations are automatically saved when you leave or print the current page of the report.
- When you record a script that includes creating annotations, and either the Print or Copy To Clipboard function, you must save the script (**Script | Save Script**) after creating the annotations and before performing the Print or Copy To Clipboard function. This ensures that the commands are sequenced properly in the script file. To include all functions performed during the recording session in the script file, you must save the script again before you stop recording (**Script | Stop Recording**).

**Note:** After you save the script once, subsequent changes to annotations that were created prior to the save are reflected in the saved annotations, but are not reflected in the script file.

## *Executing Scripts*

---

To invoke a saved script, perform the following steps:

1. Open the **Script** menu and select **Playback**. The Playback Script File dialog is displayed as shown in Figure 5-3.



DocumentDirect displays the contents of the script working directory or the last directory from which you ran a script file during the current session. The Playback Script File dialog provides access to all drives and directories. Script files are designated with filename extension .MSL.

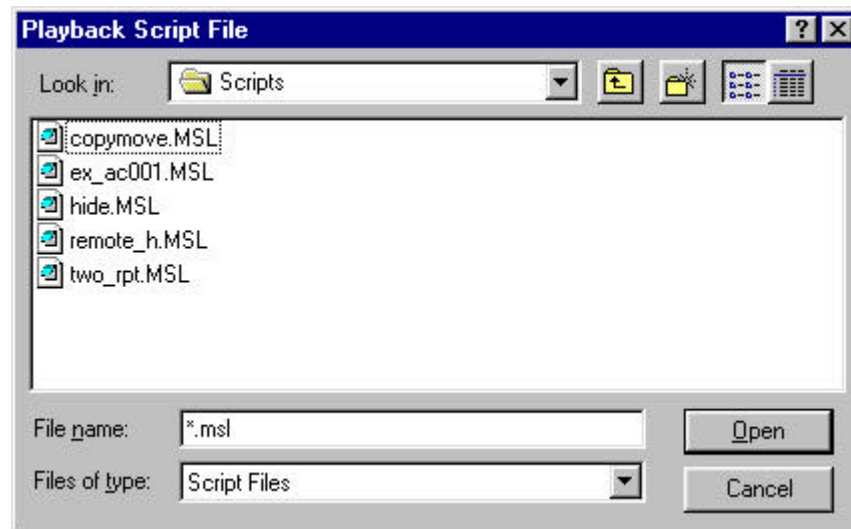


Figure 5-3. The Playback Script File Dialog

2. Highlight the script you want to invoke. Click **Open**.

If a script command fails due to a non-fatal error, such as incorrect data in a script parameter, a Script System dialog like that shown in Figure 5-4 is displayed. The dialog explains which command failed and specifies its location in the script file.

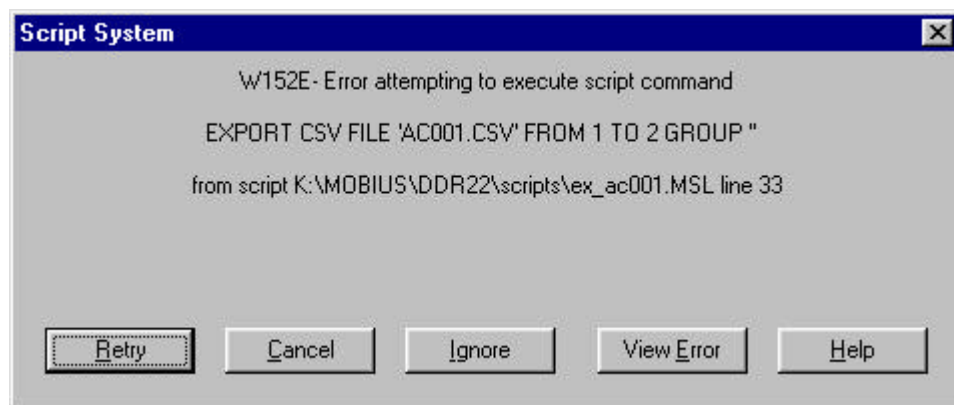


Figure 5-4. The Script System Dialog

You have the following options:

- **Retry** - Execute the command again. The Script Error dialog continues to display until the command completes successfully or you select **Cancel**. If the failed script command contains the PROMPT script operand, you are prompted to reenter the parameter when you retry the command.
- **Cancel** - Abort the script and display the DocumentDirect error message

associated with this script.

- Ignore - Stop processing the current command that is causing the error and run the rest of the script.
- View Error - Display the DocumentDirect error message associated with this script error.

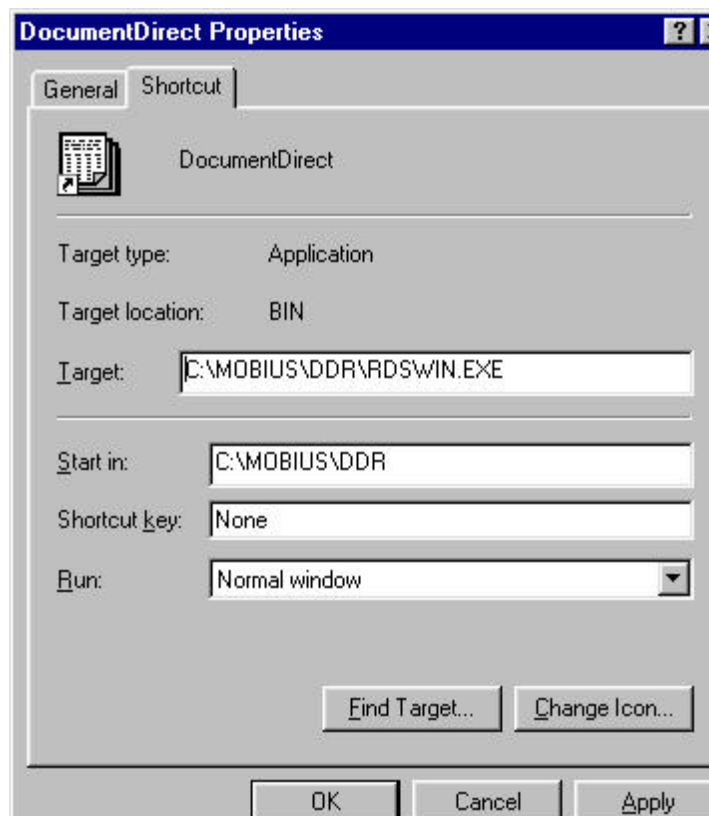
## ***Automating Scripts***

---

You can automatically run scripts by entering a script filename on the command line along with the appropriate parameters. You can enter only one script on the command line; however, that script can invoke other scripts, allowing you to execute a long series of actions simply by starting DocumentDirect. The command line also allows you to open a document, which can then be modified by the automatic script. These features are enabled through command line parameters set for an item in the Program Item Properties dialog, shown in Figure 5-5.

When you set up a script to run when you start DocumentDirect, that script runs every time the program is started. If you do not want a script to execute every time you start the program, try one of the following options:

- Set up another program icon that starts DocumentDirect in the desired manner.
- Start DocumentDirect with the task bar **Start|Run** command.



*Figure 5-5. The Program Item Properties Dialog*

## Command Line Setup

To set up a script for automatic execution, do the following:

1. Right-click the DocumentDirect icon.
2. Select **Properties** and click the Shortcut tab. The dialog shown in Figure 5-5 is displayed.
3. Click once in the **Target** box. Scroll to the end of the existing command line. Type the filename of the script you want to execute when DocumentDirect starts. For example:

```
C:\MOBIUS\DDR\RDSWIN.EXE C:\SCRIPTS\DAILY.MSL /A
```

This command line starts DocumentDirect and invokes DAILY.MSL, suppressing all non-critical error messages.

If the script file is not stored in the same directory as the DocumentDirect program, be sure to enter the complete path name for the script, as well as any file to be opened. The Program Item Properties function cannot search for script files as DocumentDirect does.

If the script file you want to execute does not have an .MSL extension, prefix the script filename with /F, followed by a space. For example:

```
C:\MOBIUS\DDR\RDSWIN.EXE /F C:\SCRIPTS\DAILY.XXX
```

To open a document upon startup, enter the path and filename of a document on the command line. If you want to run a script to modify the opened document, enter the script name after the document name on the command line. For example:

```
C:\MOBIUS\DDR\RDSWIN.EXE C:\REPORTS\MONDAY.RPT C:\SCRIPTS\DAILY.MSL
```

4. Add any further command line parameters, as needed. See Chapter C8, "Using Command Line Parameters" for complete details.
5. Click **OK**. The Program Item Properties dialog closes. Hereafter, when you start DocumentDirect, the script entered on the command line runs automatically.

## Long Filenames

You can use long filenames in DocumentDirect. If a long filename contains spaces, surround it with double quotes as illustrated in the examples below:

```
C:\MOBIUS\DDR\RDSWIN.EXE "C:\My reports\Accounts payable.rpt"  
C:\MOBIUS\DDR\RDSWIN.EXE C:\MyReports\AccountsPayable.rpt  
C:\MOBIUS\DDR\RDSWIN.EXE /f "C:\My scripts\Export Accounts Payable.xxx"  
C:\MOBIUS\DDR\RDSWIN.EXE /f C:\MyScripts\ExportAccountsPayable.xxx
```

## Script Menu Functions

---

The Script menu contains five options that allow you to create, play back, and define script settings. The table below describes the menu options.

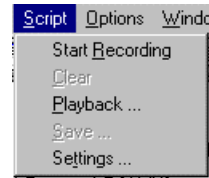


Figure 5-6. The Script Menu

Command	Description
Start/Stop Recording	Turn script recording mode on and off. When the recording function is on, all actions are recorded.
Clear Script	Erase any script actions already recorded. <b>Clear Script</b> affects only the script currently in memory, not scripts saved previously. Use <b>Clear Script</b> before recording a new script to be sure that no previously recorded steps end up in your current script.
Playback	Displays the contents of the script working directory or the last directory from which you ran a script file during the current session. The Playback Script File dialog provides access to all drives and directories. Script files are designated with filename extension .MSL.
Save Script	Write a script to disk for later use. A dialog lets you name the script. Script files are designated by the filename extension .MSL.
Settings	Access features that allow you to tailor the scripting environment to your needs. See Figure 5-7 and its associated table.

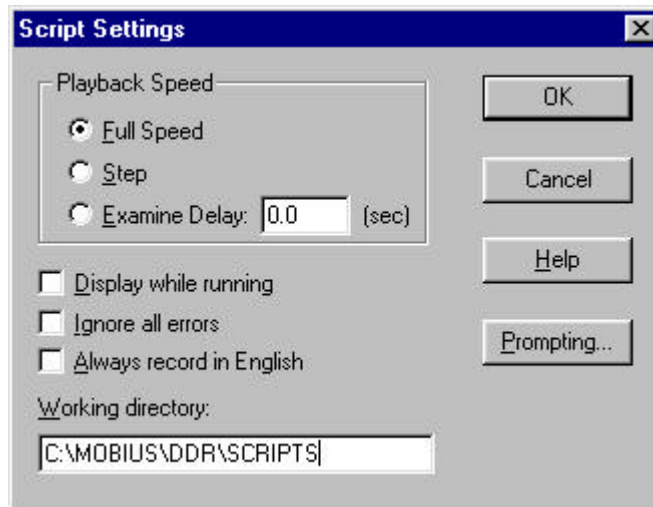


Figure 5-7. The Script Settings Dialog

Command	Description
Playback Speed	<ul style="list-style-type: none"> <li>Full Speed: Execute scripts at normal speed.</li> <li>Step: Execute scripts one step at a time, displaying script commands. After each step, the script pauses until you instruct it to go to the next step. If you select this option, a dialog like the one in Figure 5-8 is displayed at each step of script execution.</li> <li>Examine Delay: Pause script execution between steps for a set period of time. This gives you time to preview steps before they take place. Tenths of a second are the smallest increment supported. If you select this option, a dialog like the one in Figure 5-9 is displayed as the script executes.</li> </ul>
Display while running	Display the effect of scripted actions as they occur, so you can confirm the script's correct operation.
Ignore all errors	<p>Ignore errors generated by script commands, and complete the script except when any of the following occurs:</p> <ul style="list-style-type: none"> <li>The script command contains syntax errors.</li> <li>A script file does not load successfully.</li> <li>A document server specified in the script file cannot open.</li> </ul>

Command	Description
Always record in English	Save and display script commands and parameters in English, regardless of Windows Regional Settings.  This feature provides a useful default in instances where the same script may be executed in a variety of national language environments.
Working Directory	Directory used by the Playback Script File and Write Script To File dialogs.
Prompting	Select script parameters to be saved as the PROMPT script operand. See "Using the PROMPT Operand" for instructions on using the PROMPT operand.

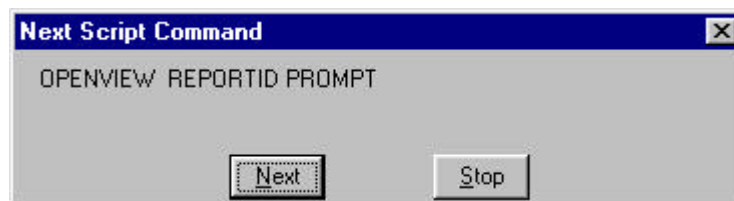


Figure 5-8. The Next Script Command Dialog

Click **Next** to make the script proceed to the next step. Click **Stop** to cancel script execution.

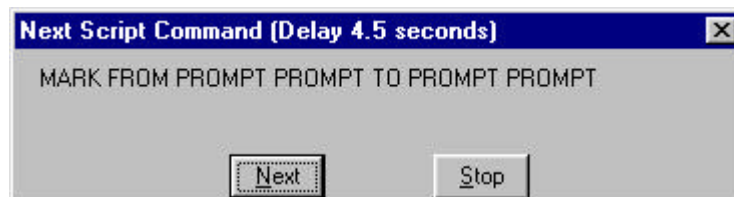


Figure 5-9. The Examine Delay Dialog

If you want the script to proceed before the delay time elapses, click **Next**. Click **Stop** to cancel script execution.

## Using the PROMPT Operand

### Overview

DocumentDirect provides a PROMPT operand that replaces parameter values in script commands. When used in place of a value, such as a filename, password, or row or column number, PROMPT displays a dialog that lets a user specify a value. By letting users enter values for script parameters each time the script is run, PROMPT lets you record scripts that are more generic. You can specify prompting text to appear in the prompt dialog or you can use the default prompting text.

The Prompt dialog allows users to input up to 1024 characters; if more than 1024 characters are entered, a syntax error occurs. Scripts that use the Prompt dialog to accept values for script commands that use the POINTS parameter (such as ANNFREEHAND) are therefore limited to approximately 50 or fewer points.

For example, the following script prompts the user to specify the Document Server ID, Report ID, and Version ID of the document to open. It further prompts for the following:

- The page at which to open the document
- The text to block
- The attributes of that block
- A CSV file to which to export the block

```
OPENVIEW SERVERID PROMPT REPORTID PROMPT("Enter the Report ID:") VERSIONID  
PROMPT  
GOTO PAGE PROMPT  
MARK FROM PROMPT PROMPT TO PROMPT PROMPT  
ADDATTR NAME PROMPTTYPE PROMPT  
EXPORT CSV FILE PROMPTCURRENT  
CLOSE
```

When script execution reaches each PROMPT, it prompts the user for parameter input. The prompting text that appears depends on whether you specified your own text or the default text. For example, when script execution reaches the first PROMPT operand in line 1 of the script, the dialog shown in Figure 5-10 is displayed, using the default prompting text.



*Figure 5-10. Default Prompting Text*

When script execution reaches the second PROMPT operand in line 1 of the script, the dialog shown in Figure 5-11 is displayed, using user-specified text to prompt for a Report ID.

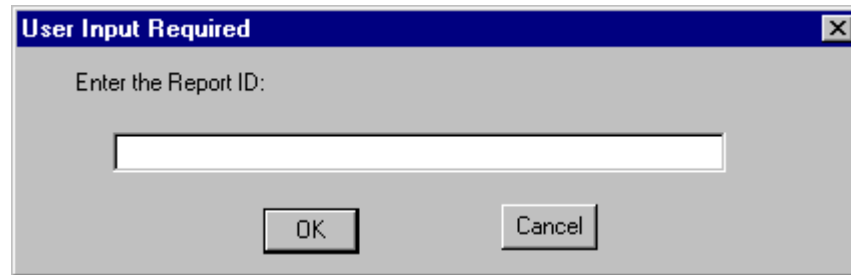


Figure 5-11. User-Specified Prompting Text

## Specifying Values for the PROMPT Operand

To select the script parameters for which you want to be prompted, follow these steps:

1. Select **Script|Settings**. The Script Settings dialog is displayed, as shown in Figure 5-7.
2. Select the **Prompting** button. The Script Prompting Configuration dialog is displayed, as shown in Figure 5-12.

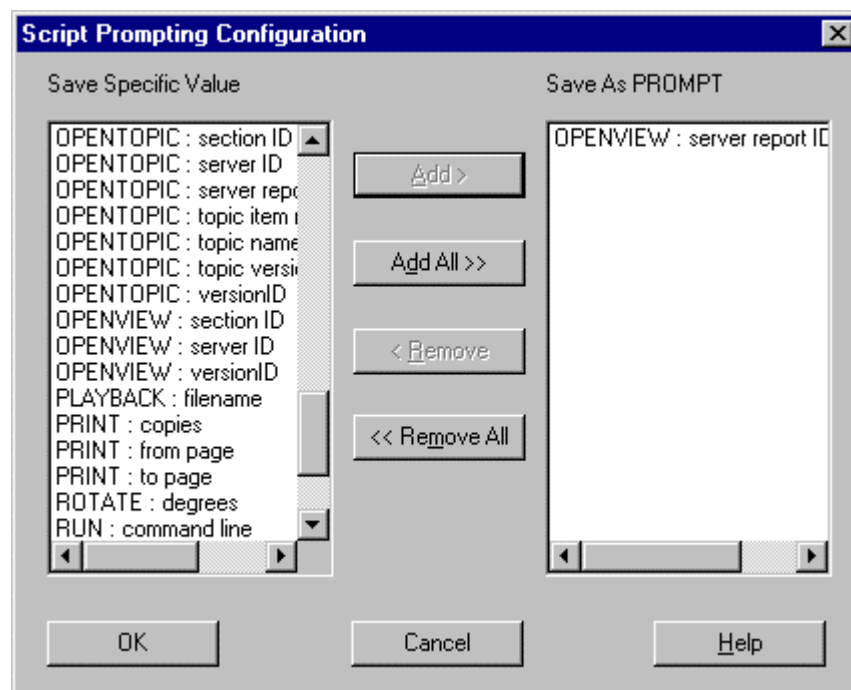


Figure 5-12. The Script Prompting Configuration Dialog

3. Select the parameters as follows:
  - To select a single parameter, click on it in the **Save Specific Value** list. To select multiple parameters, hold down the CTRL key and click on each. Click **Add**, then **OK**.



- To select all parameters, click **Add All**, then **OK**.
- To remove a single parameter, click on it in the **Save As PROMPT** list. To select multiple parameters, hold down the CTRL key and click on each. Click **Remove**, then **OK**.
- To remove all parameters, click **Remove All**, then **OK**.

When you record a script, the selected script command parameters are saved as prompts. When you play back the script, you are prompted to enter specific values as the script runs.

To specify prompting text, use a text editor to enter the PROMPT operand within a script command as follows:

```
scriptcmd parm PROMPT("user-specified prompting text")
```

where:

- *scriptcmd* is the script command.
- *parm* is the parameter for whose value you are prompting the user.
- PROMPT is the operand that specifies the user will be prompted for the parameter value.
- *user-specified prompting text* is the text that is displayed in the prompting dialog. Enclose prompting text in parentheses and either double or single quotes.

## ***Sending Scripts through E-mail***

---

DocumentDirect allows you to distribute reports by E-mailing Mobius script files to other users rather than E-mailing the contents of the entire report. The E-mail recipient double-clicks the script attachment in the E-mail message, and the script runs to launch DocumentDirect and open the specified report.

**Note:** When you E-mail a script that points to a document contained in one of your listed document servers, the E-mail recipients must be using the same document server name in order to access the document. You can E-mail a script to launch any document type except for local files that are document types associated with Windows applications.

To E-mail a script that opens a report to the current page, perform the following tasks:

1. If you want the recipient to see annotations on the report, be sure to turn on annotations in DocumentDirect by selecting **View|Annotations|Display Annotations** or by clicking the Display Annotations button on the DocumentDirect toolbar.
2. While the report is displayed in the active window, select **File|Send**. If you have a Windows Messaging session (an E-mail program) active, skip to step 5. Otherwise,

the Choose Profile dialog appears, as shown in Figure 5-:



Figure 5-13.. The Choose Profile Dialog

3. In the Profile Name field, select the appropriate profile for the Messaging session you wish to use.
4. Click **OK**. DocumentDirect displays a new E-mail message window provided by the E-mail program. For example, if you are using Microsoft Exchange as your E-mail program, a new message window similar to the one shown in Figure 5- appears.

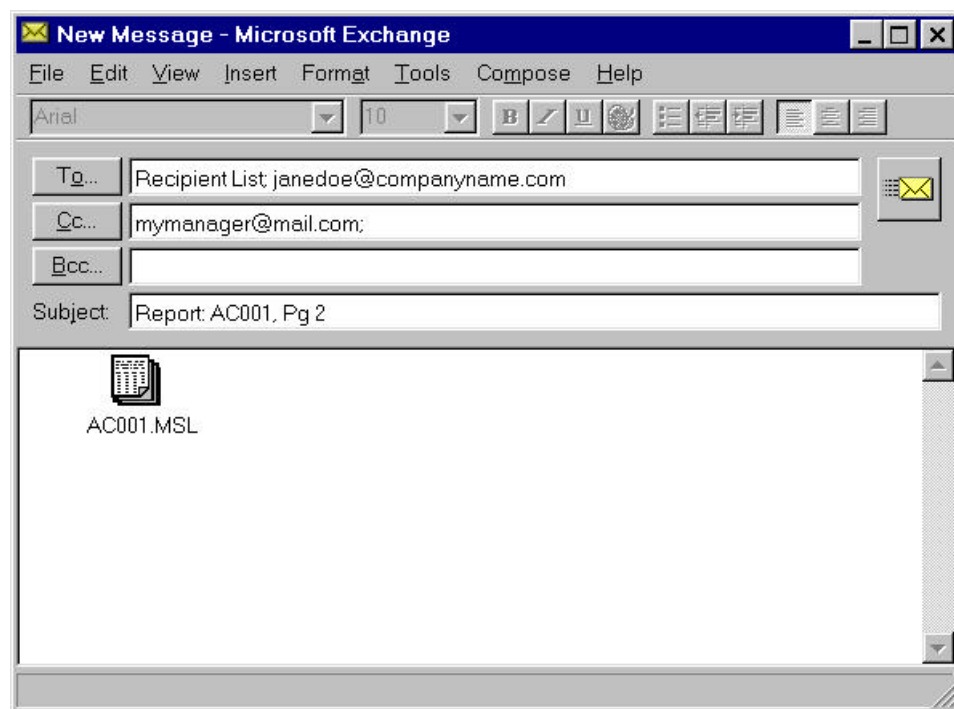


Figure 5-14. New Message Window

DocumentDirect fills in the Subject field and inserts a Mobius script as an attachment. When the E-mail recipient opens the attachment, the Mobius script launches DocumentDirect and opens the indicated report.

5. In the appropriate fields of the E-mail message window, enter the E-mail addresses of any recipients to whom you want to send, carbon copy, or blind copy this script.

6. Click or select your E-mail program's **Send** function to send the script.

Users who receive the script by E-mail can double-click the attachment to run the script. The script launches DocumentDirect and opens the specified report to the current page. If you had DocumentDirect set to display annotations when you sent the script, annotations will also be displayed when the recipient views the report page.

## ***Script Commands***

---

You can create and modify scripts using a text editor, such as Microsoft Notepad. You can record and display scripts recorded in English on any workstation, regardless of the Windows Regional Settings. (This is useful in providing an expected default for scripts that you expect may be executed in many different national language environments.) This section describes all available script commands and their associated parameters.

### **Script Command Formatting Conventions**

Script command formatting conventions are as follows:

- Enter only one command per line.
- When a script command spans more than one line, the last character of the broken line must be a backslash (\).
- Enter command names in uppercase.
- Command parameters are shown in lowercase. Substitute appropriate values.
- Parameters shown here in quotation marks must include quotation marks in actual script files. Single quotation marks are used herein, but single or double quotation marks are acceptable.
- If single quotation marks are used to surround a character string and the string contains one or more apostrophes, double the occurrence of each apostrophe.

**Example:** Enter 'Fred's book' as 'Fred"s book'.

- Optional parameters are shown in brackets, for example, [TOP].
- Mutually exclusive options are listed with the word *or* between them in italics.
- Lines and columns are numbered from the upper left-hand corner beginning with row 1, column 1.

- Screen positions (POS parameter) associated with annotation script commands are identified by a pair of decimal numbers that represent a position on the screen the same way column and row numbers are used to locate a position on a report. Line widths (LINEWIDTH parameter) associated with annotation script commands are identified by a single decimal number that represents the thickness of the line. The decimal numbers are automatically converted to the nearest pixel when displayed on the screen.
- Denote comments with semicolons. Any text following a semicolon is ignored. Blank lines are also ignored.

**Example:** HIDE CURMARK ; This command hides a current block.

## ADDATTR

Function: Add attributes to marked text.

Syntax: ADDATTR [TOP] [LEFT] [RIGHT] [BOTTOM] NAME 'blockname' TYPE 'data type' [REPEAT]

Parameters:

- TOP/LEFT/RIGHT/BOTTOM: Extend the mark to the margin in the specified direction.
- blockname: Name of this block.
- data type: CHARACTER (alphanumeric data) or NUMBER (numeric data).
- REPEAT: Fill blank lines with the data in the line above.

Notes: This command works only with character data. A block must be marked for this command to succeed.

Example: Extend the mark to the right margin, assign block name zzz, and designate the block as character data that repeats on blank lines.  
ADDATTR RIGHT NAME 'zzz' TYPE 'CHARACTER' REPEAT

## ANALYZER

# MOBIUS

# DocumentDirect 2.2

- Function:** Launch DocuAnalyzer.
- Syntax:** ANALYZER [FILE 'filename'] [PROJECT 'projectname']
- Parameters:**
- FILE: Open with 'filename' loaded.
  - PROJECT: Open with 'projectname' loaded. If 'projectname' does not exist, a project by that name is created.
- If FILE and PROJECT are specified, 'filename' is opened in 'projectname', replacing the file already present in that project.
- Notes:** If you invoke DocuAnalyzer with FILE or PROJECT specified while it is already running, it prompts you to save and close any currently open files and projects; then it opens 'filename' and/or 'projectname'.
- Examples:**
- Start DocuAnalyzer or switch to the running application in its current state.  
ANALYZER
  - Start DocuAnalyzer with 'C:\REPORTS\AC001.RPT' loaded.  
ANALYZER FILE 'C:\REPORTS\AC001.RPT'
  - Start DocuAnalyzer with 'C:\REPORTS\AC001.RPT' loaded within 'C:\PROJECTS\AC001.PRJ'.  
ANALYZER FILE 'C:\REPORTS\AC001.RPT'  
PROJECT 'C:\PROJECTS\AC001.PRJ'

## ANNAUDIO

- Function:** Attach a WAV file to the current report page.
- Syntax:** ANNAUDIO POS left top right bottom FILE 'filename'
- Parameters:**
- left top: Pair of decimal numbers that defines the screen position of the left top corner of the rectangle displaying the speaker icon.
  - right bottom: Pair of decimal numbers that defines the screen position of the right bottom corner of the rectangle displaying the speaker icon.
  - filename: Full path and filename of the WAV file.
- Example:** Attach an audio annotation.  
ANNAUDIO POS 410 222 485 277.5 FILE  
'H:\MEDIA\Wiz.wav'

## ANNELLIPSE

- Function: Draw an ellipse or a circle on the current report page.
- Syntax: ANNELLIPSE POS left top right bottom  
[FORECOLOR forecolor] [BACKCOLOR backcolor]  
[LINEWIDTH width] [LINESTYLE style]  
[FILLPATTERN pattern] [FILLMODE mode]
- Parameters:
- left top: Pair of decimal numbers that defines the screen position of the left top corner of the rectangle bounding the ellipse or circle.
  - right bottom: Pair of decimal numbers that defines the screen position of the right bottom corner of the rectangle bounding the ellipse or circle.
  - forecolor: Decimal number that defines the RGB color of the border of the ellipse. Defaults to red.
  - backcolor: Decimal number that defines the RGB color of the interior of the ellipse. Defaults to white.
  - width: Decimal number that defines the width of the border of the ellipse. Defaults to a width of 1.
  - style: 0, 1, 2, 3, 4, or 5 corresponding to solid, dash, dot, dash-dot, dash-dot-dot, or null. Note: Windows displays all lines wider than 1 pixel as solid.
  - pattern: 0, 1, 2, 3, 4, 5, or 6 corresponding to solid, backward-diagonal, cross, diagonal-cross, forward-diagonal, horizontal, or vertical. Defaults to solid.
  - mode: 0, 1, or 2 corresponding to transparent, translucent, or opaque. Defaults to transparent.
- Example: Draw an ellipse with a yellow opaque filled center.  
ANNELLIPSE POS 261 138.75 380 173.25  
BACKCOLOR 65535 FILLMODE 2

## ANNFREEHAND

- Function: Draw a freehand line on the current report page.
- Syntax: ANNFREEHAND POINTS count  $x_1$   $y_1$   $x_2$   $y_2$  [ $x_3$   $y_3$ ]...  
[FORECOLOR forecolor] [LINEWIDTH width]  
[LINESTYLE style]
- Parameters:
- count: Number of x y pairs listed.
  - $x_1$   $y_1$ : Each x y pair of decimal numbers defines a single point. A freehand line is made up of many connected points. There must be a minimum of two x y pairs, or points, defined.
  - forecolor: Decimal number that defines the RGB color of the freehand line. Defaults to red.
  - width: Decimal number that defines the width of the line.
  - style: 0, 1, 2, 3, 4, or 5 corresponding to solid, dash, dot, dash-dot, dash-dot-dot, or null. Note: Windows displays all lines wider than 1 pixel as solid.
- Example: Draw a freehand annotation.
- ```
ANNFREEHAND POINTS 14 252 259.5 258 259.5
266 259.5 274 259.5 286 259.5 296 258.75 306 258
316 256.5 324 252 330 247.5 332 243 338 238.5 339
237.75 340 237
```

## ANNHILITE

- Function: Draw a transparent color over a portion of the current report page.
- Syntax: ANNHILITE POS left top right bottom [BACKCOLOR backcolor]
- Parameters:
- left top: Pair of decimal numbers that defines the screen position of the left top corner of the highlighted area.
  - right bottom: Pair of decimal numbers that defines the screen position of the right bottom corner of the highlighted area.
  - backcolor: Decimal number that defines the RGB color of the highlight. Defaults to yellow.
- Example: Highlight an area with the default color.
- ```
ANNHILITE POS 26 231.75 213 268.5
```

**ANNLINE**

- Function:** Draw a straight line on the current report page.
- Syntax:** ANNLINE POS left top right bottom [FORECOLOR forecolor] [LINEWIDTH width] [LINESTYLE style]
- Parameters:**
- left top: Pair of decimal numbers that defines the screen position of the left top end of the line.
  - right bottom: Pair of decimal numbers that defines the screen position of the right bottom end of the line.
  - forecolor: Decimal number that defines the RGB color of the line. Defaults to red.
  - width: Decimal number that defines the width of the line. Defaults to a width of 1.
  - style: 0, 1, 2, 3, 4, or 5 corresponding to solid, dash, dot, dash-dot, dash-dot-dot, or null. Defaults to solid.
- Note: Windows displays all lines wider than 1 pixel as solid.
- Example:** Draw a heavy dotted line.
- ```
ANNLINE POS 246 120.75 346 121.5 LINEWIDTH 10 LINESTYLE 2
```

**ANNNOTE**

- Function:** Attach a sticky note to the current report page.
- Syntax:** ANNNOTE 'text' POS left top right bottom [FORECOLOR forecolor] [BACKCOLOR backcolor] [FONTNAME 'name'] [FONTSTYLE style] [FONTSIZE n]
- Parameters:**
- 'text': Message that appears inside the sticky note.
  - left top: Pair of decimal numbers that defines the screen position of the left top corner of the sticky note.
  - right bottom: Pair of decimal numbers that defines the screen position of the right bottom corner of the sticky note.
  - forecolor: Decimal number that defines the RGB color of the text. Defaults to red.
  - backcolor: Decimal number that defines the RGB background color of the sticky note. Defaults to yellow.
  - name: Font name. Defaults to Arial.
  - style: Composite of bold, italic, underline, and strike-through attributes. Regular text has a style value of 0. Add the values of all of the required styles to get the final style. Bold, italic, underline, and strike-through have values of 1, 2, 4, and 8, respectively, e.g., bold-italic text has a value of  $0 + 1 + 2 = 3$ . Defaults to regular.
  - n: Font point size. Defaults to 10-point. Note: Some fonts support a limited number of point sizes.
- Example:** Draw a note with underlined 15-point text.
- ```
ANNNOTE 'Message text' POS 248 318 344 361.5 FONTSTYLE 4 FONTSIZE 15
```



## ANNOTATION

Function: Display, edit, or hide annotations.

Syntax: ANNOTATION DISPLAY *or* EDIT *or* HIDE

Parameters:

- DISPLAY: Displays annotations.
- EDIT: Enables editing of annotations.
- HIDE: Hides annotations.

Example: ANNOTATION DISPLAY

## ANNPOINTER

Function: Draw a pointer annotation on the current report page.

Syntax: ANNPOINTER POS left top right bottom  
[FORECOLOR forecolor] [LINEWIDTH width]  
[LINESTYLE style]

Parameters:

- left top: Pair of decimal numbers that defines the screen position of the left top end of the pointer.
- right bottom: Pair of decimal numbers that defines the screen position of the right bottom end of the pointer.
- forecolor: Decimal number that defines the RGB color of the border of the pointer. Defaults to red.
- width: Decimal number that defines the width of the lines forming the pointer. Defaults to a width of 1.
- style: 0, 1, 2, 3, 4, or 5 corresponding to solid, dash, dot, dash-dot, dash-dot-dot, or null. Defaults to solid.

Note: Windows displays all lines wider than 1 pixel as solid.

Example: Draw a blue pointer.

ANNPOINTER POS 38 186 186 213 FORECOLOR  
16711680 LINEWIDTH 1 LINESTYLE 0

## ANNPOLYGON

- Function: Draw a sequence of connected line segments that form a closed shape on the current report page.
- Syntax: `ANNPOLYGON POINTS count x1 y1 x2 y2 [x3 y3]...  
[FORECOLOR forecolor] [BACKCOLOR backcolor]  
[LINEWIDTH width] [LINESTYLE style]  
[FILLPATTERN pattern] [FILLMODE mode]  
[FILLTYPE type]`
- Parameters:
- count: Number of x y pairs listed. The number of sides in the polygon is one less than "count."
  - x<sub>1</sub> y<sub>1</sub>: Each x y pair of decimal numbers defines a single point. A polygon is made up of many connected points. The first and last points must be the same.
  - forecolor: Decimal number that defines the RGB color of the border of the polygon. Defaults to red.
  - backcolor: Decimal number that defines the RGB color of the interior of the polygon. Defaults to white.
  - width: Decimal number that defines the width of the border of the polygon. Defaults to a width of 1.
  - style: 0, 1, 2, 3, 4, or 5 corresponding to solid, dash, dot, dash-dot, dash-dot-dot, or null. Defaults to solid. Note: Windows displays all lines wider than 1 pixel as solid.
  - pattern: 0, 1, 2, 3, 4, 5, or 6 corresponding to solid, backward-diagonal, cross, diagonal-cross, forward-diagonal, horizontal, or vertical. Defaults to solid.
  - mode: 0, 1, or 2 corresponding to transparent, translucent, or opaque. Defaults to transparent.
  - type: 0 or 1 corresponding to winding or alternate fill types. Defaults to winding.
- Example: Draw a polygon with five sides filled with a red vertical pattern.
- ```
ANNPOLYGON POINTS 6 258 189.75 376 202.5  
364 231 269 232.5 287 217.5 258 189 BACKCOLOR  
255 FILLPATTERN 6
```

## ANNPOLYLINE

**Function:** Draw a sequence of connected line segments that do not form a closed shape on the current report page.

**Syntax:** ANNPOLYLINE POINTS count  $x_1 y_1 x_2 y_2 [x_3 y_3] \dots$   
[FORECOLOR forecolor] [LINEWIDTH width]  
[LINESTYLE style]

**Parameters:**

- count: Number of x y pairs listed. The number of lines in the polyline is one less than "count."
- $x_1 y_1$ : Each x y pair of decimal numbers defines a single point. A polyline is made up of many connected points. There must be a minimum of two x y pairs, or points, defined.
- forecolor: Decimal number that defines the RGB color of the polyline. Defaults to red.
- width: Decimal number that defines the width of the polyline. Defaults to a width of 1.
- style: 0, 1, 2, 3, 4, or 5 corresponding to solid, dash, dot, dash-dot, dash-dot-dot, or null. Defaults to solid.  
Note: Windows displays all lines wider than 1 pixel as solid.

**Example:** Draw a red polyline annotation.  
ANNPOLYLINE POINTS 5 47 103.5 204 114.75 136  
180 52 162 47 102.75 FORECOLOR 255  
LINEWIDTH 1 LINESTYLE 0

## ANNRECT

- Function:** Draw a rectangle or square on the current report page.
- Syntax:** ANNRECT POS left top right bottom [FORECOLOR forecolor] [BACKCOLOR backcolor] [LINEWIDTH width] [LINESTYLE style] [FILLPATTERN pattern] [FILLMODE mode]
- Parameters:**
- left top: Pair of decimal numbers that defines the screen position of the left top corner of the rectangle or square.
  - right bottom: Pair of decimal numbers that defines the screen position of the right bottom corner of the rectangle or square.
  - forecolor: Decimal number that defines the RGB color of the border of the rectangle. Defaults to red.
  - backcolor: Decimal number that defines the RGB color of the interior of the rectangle. Defaults to white.
  - width: Decimal number that defines the width of the border of the rectangle. Defaults to a width of 1.
  - style: 0, 1, 2, 3, 4, or 5 corresponding to solid, dash, dot, dash-dot, dash-dot-dot, or null. Defaults to solid. Note: Windows displays all lines wider than 1 pixel as solid.
  - pattern: 0, 1, 2, 3, 4, 5, or 6 corresponding to solid, backward-diagonal, cross, diagonal-cross, forward-diagonal, horizontal, or vertical. Defaults to solid.
  - mode: 0, 1, or 2 corresponding to transparent, translucent, or opaque. Defaults to transparent.
- Example:** Draw a red rectangle.
- ```
ANNRECT POS 32 18.75 182 74.25 FORECOLOR
255 BACKCOLOR 16777215 LINEWIDTH 1
LINESTYLE 0 FILLPATTERN 0 FILLMODE 0
```

## ANNREDACT

- Function:** Draw a rectangle filled with a chosen color on the current report page.
- Syntax:** ANNREDACT POS left top right bottom [BACKCOLOR backcolor]
- Parameters:**
- left top: Pair of decimal numbers that defines the screen position of the left top corner of the redact.
  - right bottom: Pair of decimal numbers that defines the screen position of the right bottom corner of the redact.
  - backcolor: Decimal number that defines the RGB color of the interior of the rectangle. Defaults to black.
- Example:** Draw a red redact annotation.
- ```
ANNREDACT POS 250 276 361 305.25
BACKCOLOR 16777215
```

## ANNRULER

- Function:** Draw a line that measures items on a report.
- Syntax:** ANNRULER 'text' POS left top right bottom  
[FORECOLOR forecolor] [LINEWIDTH width]  
[LINESTYLE linestyle] [FONTNAME 'name']  
[FONTSTYLE style] [FONTSIZE n] [WIDTH rulerwidth]  
[UNITS 'INCHES' or 'FEET' or 'YARDS' or 'UMETERS' or 'MMETERS' or 'CMETERS' or 'METERS' or 'TWIPS' or 'POINTS' or 'PIXELS']  
[PRECISION precision]
- Parameters:**
- 'text': Abbreviation of the measurement units to be displayed. If not provided, the appropriate default abbreviation is used. For example, if UNITS is 'MMETERS', the default abbreviation is "mm."
  - left top: Pair of decimal numbers that defines the screen position of the left top end of the ruler.
  - right bottom: Pair of decimal numbers that defines the screen position of the right bottom end of the ruler.
  - forecolor: Decimal number that defines the RGB color of the text and ruler. Defaults to red.
  - width: Decimal number that defines the width of the lines forming the ruler. Defaults to a width of 1.
  - linestyle: 0, 1, 2, 3, 4, or 5 corresponding to solid, dash, dot, dash-dot, dash-dot-dot, or null. Defaults to solid. Note: Windows displays all lines wider than 1 pixel as solid.
  - name: Font name. Defaults to Arial.
  - style: Composite of bold, italic, underline, and strike-through attributes. Regular text has a style value of 0. Add the values of all of the required styles to get the final style. Bold, italic, underline, and strike-through have values of 1, 2, 4, and 8, respectively, e.g., bold-italic text has a value of  $0 + 1 + 2 = 3$ . Defaults to regular.
  - n: Font point size. Defaults to 10-point. Note: Some fonts support a limited number of point sizes.
  - rulerwidth: Specifies, in pixels, the height of the perpendicular lines at the ends of the ruler. Defaults to 30.
  - INCHES: Measure in inches.
  - FEET: Measure in feet.
  - YARDS: Measure in yards.
  - UMETERS: Measure in micrometers.
  - MMETERS: Measure in millimeters. Defaults to "mm."
  - CMETERS: Measure in centimeters.
  - METERS: Measure in meters.
  - TWIPS: Measure in twips.
  - POINTS: Measure in points.
  - PIXELS: Measure in pixels.
  - precision: Number of decimal positions to display to the right of the decimal point. Defaults to 2.
- Example:** Draw a ruler that measures 1.500 inches.  
ANNRULER POS 251 91.5 368 94.5 WIDTH 10  
UNITS 'INCHES' PRECISION 3

## ANNSTAMP

- Function:** Attach a text message or a BMP image to the current report page.
- Syntax:** ANNSTAMP 'text' POS left top right bottom  
[FORECOLOR forecolor] [BACKCOLOR backcolor]  
[LINEWIDTH width] [LINESTYLE linestyle]  
[FILLPATTERN pattern] [FILLMODE mode]  
[FONTNAME 'name'] [FONTSTYLE style]  
[FONTSIZE n] [FILE 'filename']
- Parameters:**
- 'text': Message displayed. If both 'text' and FILE parameters are used, only the contents of the 'text' parameter is displayed. To display the bitmap image, do not include any text in the 'text' parameter; the quotes are required.
  - left top: Pair of decimal numbers that defines the screen position of the left top corner of the rectangle displaying the text or bitmap image.
  - right bottom: Pair of decimal numbers that defines the screen position of the right bottom corner of the rectangle displaying the text or bitmap image.
  - forecolor: Decimal number that defines the RGB color of the text and border of the rectangle. Defaults to red.
  - backcolor: Decimal number that defines the RGB color of the interior of the rectangle. Defaults to white.
  - width: Decimal number that defines the width of the border of the rectangle. Defaults to a width of 1.
  - linestyle: 0, 1, 2, 3, 4, or 5 corresponding to solid, dash, dot, dash-dot, dash-dot-dot, or null. Defaults to solid. Note: Windows displays all lines wider than 1 pixel as solid.
  - pattern: 0, 1, 2, 3, 4, 5, or 6 corresponding to solid, backward-diagonal, cross, diagonal-cross, forward-diagonal, horizontal, or vertical. Defaults to solid.
  - mode: 0, 1, or 2 corresponding to transparent, translucent, or opaque. Defaults to transparent.
  - name: Font name. Defaults to Arial.
  - style: Composite of bold, italic, underline, and strike-through attributes. Regular text has a style value of 0. Add the values of all of the required styles to get the final style. Bold, italic, underline, and strike-through have values of 1, 2, 4, and 8, respectively, e.g., bold-italic text has a value of  $0 + 1 + 2 = 3$ . Defaults to regular.
  - n: Font point size. Defaults to 10-point. Note: Some fonts support a limited number of point sizes.
  - filename: Full path and filename of the file containing the bitmap used as the stamp image. If both 'text' and FILE parameters are used, only the contents of the 'text' parameter is displayed. To display the bitmap image, do not include any text in the 'text' parameter; the quotes are required.
- Example:** Draw a stamp with a bitmap containing a signature.  
ANNSTAMP " POS 261 24.75 362 64.5 FILE  
'H:\STAMPS\SIGS\SIGNATUR.BMP'

## ANNTEXT

Function: Attach a text annotation to the current report page.

Syntax: ANNTEXT 'text' POS left top right bottom  
[FORECOLOR forecolor] [BACKCOLOR backcolor]  
[FILLMODE mode] [FONTNAME 'name']  
[FONTSTYLE style] [FONTSIZE n]

Parameters:

- 'text': Message displayed.
- left top: Pair of decimal numbers that defines the screen position of the left top corner of the rectangle displaying the text.
- right bottom: Pair of decimal numbers that defines the screen position of the right bottom corner of the rectangle displaying the text.
- forecolor: Decimal number that defines the RGB color of the text. Defaults to red.
- backcolor: Decimal number that defines the RGB color of the interior of the rectangle displaying the text. Defaults to white.
- mode: 0, 1, or 2 corresponding to transparent, translucent, or opaque.
- name: Font name. Defaults to Arial.
- style: Composite of bold, italic, underline, and strike-through attributes. Regular text has a style value of 0. Add the values of all of the required styles to get the final style. Bold, italic, underline, and strike-through have values of 1, 2, 4, and 8, respectively, e.g., bold-italic text has a value of  $0 + 1 + 2 = 3$ . Defaults to regular.
- n: Font point size. Defaults to 10-point. Note: Some fonts support a limited number of point sizes.

Example: Draw a black strike-through, bold text annotation.  
ANNTEXT 'Annotation Message' POS 28 290.25 297  
326.25 FORECOLOR 0 FONTSTYLE 9

## ARRANGE

- Function: Tile or cascade currently open windows, or arrange the icons of currently minimized windows.
- Syntax: `ARRANGE HORIZONTALLY` *or* `VERTICALLY` *or* `CASCADE` *or* `ICONS`
- Parameters:
- `HORIZONTALLY`: Horizontally tiles all open windows.
  - `VERTICALLY`: Vertically tiles all open windows.
  - `CASCADE`: Cascades all open windows.
  - `ICONS`: Arranges, above the status bar, the icons of all currently minimized windows.
- Example: `ARRANGE CASCADE`

## CARETPOS



- Function:** Move the caret to either a fixed or relative position.
- Syntax:** CARETPOS [RELATIVE] row col
- Parameters:**
- **RELATIVE:** Move in relation to the current caret position.
  - **row:** Row number to which to move from the current origin. If RELATIVE is specified, a positive row number moves the caret down that many rows from the last caret position; a negative row number moves the caret up that many rows from the last caret position.
  - **col:** Column number to which to move from the current origin. If RELATIVE is specified, a positive number moves the caret that many columns to the right of the last caret position; a negative number moves the caret that many columns to the left of the last caret position.
- Examples:**
- Move the caret to row 5, column 10 of the current report.  
CARETPOS 5 10
  - Move the caret 5 rows down and 10 columns to the right from the current caret position.  
CARETPOS RELATIVE 5 10

## CLOSE

- Function:** Close the current report.
- Syntax:** CLOSE
- Parameters:** None.
- Note:** CLOSE is invalid if no report is open.

## CLOSEDS

- Function:** Disconnect from a document server.
- Syntax:** CLOSEDS SERVERID 'serverid'
- Parameter:** serverid: Document Server ID.
- Notes:**
- CLOSEDS does not require an open Document Explorer window.
  - CLOSEDS closes any open reports before disconnecting from the document server.
- Example:** Disconnect from document server HLLAPI A.  
CLOSEDS SERVERID 'HLLAPI A'

## CLRVIEW

Function: Restore the original page view; reset origin; remove attributes; raise anchor.

Syntax: CLRVIEW

Parameters: None.

Note: Images are reset to 100% scaling.

## COLORDEPTH

Function: Change the color depth of an image report.

Syntax: COLORDEPTH BITSPERPIXEL number *or*  
COLORDEPTH GRAYSCALE

Parameters: 

- number: Specifies the number of bits per pixel in which to display an open image. This number is translated into a number of colors as follows:

0 The number of colors stored in the image.  
0 is the default.

1 2 colors: black and white.

2 4 colors

4 16 colors

8 256 colors

24 16 million colors

32 True color

- GRAYSCALE: Displays the image in 256 shades of gray.

Notes: You must open an image report before issuing this script command.

This script command is not valid for LPFD image reports.

Example: Set the color depth of the open image report to 256 colors.  
COLORDEPTH BITSPERPIXEL 8

## COPY

- Function: Copy a block to another location on the page.
- Syntax: COPY [TOP] [LEFT] [RIGHT] [BOTTOM]  
CURMARK *or* FROM row1 col1 width height  
TOCARET *or* TOPOS row2 col2
- Parameters:
- TOP/LEFT/RIGHT/BOTTOM: Extend the mark to the margin in the specified direction.
  - CURMARK: Copy text currently marked.
  - row1 col1: Upper left corner of area to copy.
  - width height: Width and height of area to copy. Width and height have a minimum value of 1.
  - TOCARET: Copied text appears at current caret location.
  - row2 col2: Row and column where copied text should appear. The upper left corner of the block appears at these coordinates.
- Notes:
- CURMARK and FROM are mutually exclusive.
  - TOCARET and TOPOS are mutually exclusive.
- Examples:
- Copy marked text to the current caret location.  
COPY CURMARK TOCARET
  - Copy the current block, extended to the bottom of the page, to row 20, column 1.  
COPY BOTTOM CURMARK TOPOS 20 1
  - Copy the top ten rows and columns to row 25, column 10.  
COPY FROM 1 1 10 10 TOPOS 25 10
  - Copy the top 10 rows of the report to the current caret position.  
COPY RIGHT FROM 1 1 10 10 TOCARET

## COPYCLIP

- Function:** Copy sections, pages, or blocks to the Windows Clipboard.
- Syntax:** COPYCLIP CURMARK *or* ALL *or* CURSEC *or* CURPAGE *or* FROM first TO last  
[COPYASIMAGE][ANNOTATE][output resolution quality]
- Parameters:**
- CURMARK: Copy currently marked block.
  - ALL: Copy entire report.
  - CURSEC: Copy all pages in the current section.
  - CURPAGE: Copy current page only.
  - first: Number of first page to copy. Must be at least 1.
  - last: Number of the last page to copy. Must be equal to or greater than first.
  - COPYASIMAGE: Copy text to graphical image format. Specify COPYASIMAGE only with CURMARK or CURPAGE.
  - ANNOTATE: Include annotations. To specify ANNOTATE for text documents, you must also specify COPYASIMAGE.
  - output resolution quality: LOWRES (screen resolution) or MEDRES (240 dpi) or HIGHRES (480 dpi). LOWRES is the default output resolution quality. MEDRES and HIGHRES are valid only for LPFD images.
- Notes:**
- Pages are copied to the Clipboard as they appear in the current view.
  - During script recording, save the script after adding annotations and before using the COPYCLIP function. This ensures that the commands are sequenced properly in the script file.
- Examples:**
- Copy marked block as an image to the Clipboard.  
COPYCLIP CURMARK COPYASIMAGE
  - Copy all pages to the Clipboard.  
COPYCLIP ALL
  - Copy all pages in current section to the Clipboard.  
COPYCLIP CURSEC
  - Copy the current text page as an image with annotations to the Clipboard.  
COPYCLIP CURPAGE COPYASIMAGE ANNOTATE
  - Copy pages 1 to 3 to the Clipboard.  
COPYCLIP FROM 1 TO 3
  - Copy the current page with annotations using medium resolution to the Clipboard.  
COPYCLIP CURPAGE ANNOTATE MEDRES

## CUSTOM

- Function: Specify the width and height of an image, and the unit of measurement by which it is measured.
- Syntax: CUSTOM WIDTH width HEIGHT height UNITS 'INCHES' or 'MMETERS' or 'PIXELS'
- Parameters:
- width: Image width in selected unit of measurement.
  - height: Image height in selected unit of measurement.
  - INCHES: Measure width/height in inches.
  - MMETERS: Measure width/height in millimeters.
  - PIXELS: Measure width/height in pixels.
- Note: CUSTOM is valid for image reports only.
- Example: Display an image three inches wide by three inches high.  
CUSTOM WIDTH 3.00 HEIGHT 3.00 UNITS 'INCHES'

## DBCSSOSI

- Function: Display DBCS-Host SO/SI characters as blanks or hide them.
- Syntax: DBCSSOSI ON or OFF
- Parameters:
- ON: Display DBCS-Host SO/SI characters as blanks.
  - OFF: Hide DBCS-Host SO/SI characters.
- Note: DBCSSOSI is valid only for text reports containing DBCS-Host data.
- Examples: DBCSSOSI ON  
DBCSSOSI OFF

## DROPANCH

- Function: Drop the anchor at the current caret position.
- Syntax: DROPANCH
- Parameters: None.
- Note: Removes any anchor previously dropped.

## EDITATTR

Function: Edit assigned attributes.

Syntax: EDITATTR NAME 'blockname' TYPE 'data type' [REPEAT]

Parameters:

- blockname: Name of the block to be edited.
- data type: CHARACTER (alphanumeric data) or NUMBER (numeric data)
- REPEAT: Fill blank lines with the data in the line above.

Example: Change block zzz to numeric data that repeats on blank lines.  
EDITATTR NAME 'zzz' TYPE 'NUMBER' REPEAT

## EXIT

Function: Exit DocumentDirect.

Syntax: EXIT [DELETESCRIPT]

Parameters:

- DELETESCRIPT: Delete the script file when exiting DocumentDirect.

Note: EXIT cannot be recorded in a script, because executing the command closes the program before a script can be saved. Insert the EXIT command into a script with a text editor.

## EXPORT

- Function:** Save pages, blocks, or fields to disk.
- Syntax:** EXPORT ASCII *or* CSV *or* SYLK *or* XML FILE  
'filename' ALL *or* CURSEC *or* CURPAGE *or* FROM  
first TO last [APPEND] [GROUP 'groupname']  
[HEADERS]]
- Parameters:**
- ASCII: Export pages in ASCII format.
  - CSV: Export data in Comma Separated Variable format.
  - SYLK: Export data in Symbolic Link format.
  - XML: Export data in Extensible Markup Language format.
  - filename: Filename where the data should be stored.
  - ALL: Export all pages of displayed report.
  - CURSEC: Export all pages of the current section.
  - CURPAGE: Export displayed page.
  - first: Number of first page to export. Must be at least 1.
  - last: Number of the last page to export. Must be equal to or greater than first.
  - APPEND: Append exported data to the destination file. This is an optional parameter.
  - groupname: Name of a group of fields in policy file to export. This is an optional parameter. If you specify groupname, you must also specify CSV, SYLK, or XML.
  - HEADERS: Export field names as column headers. This is an optional parameter that can be used only with groupname and CSV or SYLK formats.
- Notes:**
- ASCII pages export as they are currently displayed.
  - CSV, SYLK, and XML require that attributes were assigned or that a policy was loaded.
  - Appending data to an existing file requires that the exported data and the destination file are of the same format. You can append data only in ASCII and CSV formats.
  - Groupname requires that a policy was loaded.
- Examples:**
- Export the current page in SYLK format to the filename C:\REPORTS\DAILY.SLK.  
EXPORT SYLK FILE 'C:\REPORTS\DAILY.SLK'  
CURPAGE
  - Export pages 1 to 3 in CSV format to the filename C:\REPORTS\DAILY.CSV.  
EXPORT CSV FILE 'C:\REPORTS\DAILY.CSV' FROM  
1 TO 3
  - Export the group of fields named BALANCE from the current section in SYLK format to the filename C:\REPORTS\DAILY.SLK.  
EXPORT SYLK FILE 'C:\REPORTS\DAILY.SLK'  
CURSEC GROUP 'BALANCE'
  - Export fields with column headers for the groupname BALANCE from all pages in CSV format to the filename C:\REPORTS\DAILY.SLK.  
EXPORT CSV FILE 'C:\REPORTS\DAILY.SLK' ALL  
GROUP 'BALANCE' HEADERS





**Function:** Locate a text string.

**Syntax:** FIND 'text' [ASIS] [UP/DOWN][CURRENTSECTION]

**Parameters:**

- 'text': Search for text within quotes. Blank spaces may be included within the quotes.
- ASIS: Make the search case sensitive.
- UP: Search backward, toward the top of the report.
- DOWN: Search forward, toward the end of the report. DOWN is the default setting.
- CURRENTSECTION: Search within the current section only.

**Note:** Find starts from the current caret position.

**Example:** Find the words "OFFICE TOTAL" in uppercase letters from the caret position to the end of the document.  
FIND 'OFFICE TOTAL' ASIS DOWN

## FINDNEXT

**Function:** Locate the next occurrence of the previous text string.

**Syntax:** FINDNEXT

**Parameters:** None.

**Note:** This command is only available after a FIND command is performed.

## FIT

**Function:** FIT WIDTH and FIT HEIGHT fit image width or height within current window size. FIT PAPER fits the image onto the selected paper size. FIT ACTUALSIZE fits the image to its original size, or, if the size information is not available, to 100% scaling.

**Syntax:** FIT WIDTH *or* HEIGHT *or* PAPER *or* ACTUALSIZE

**Parameters:**

- WIDTH: Image fits window from side to side.
- HEIGHT: Image fits window from top to bottom.
- ACTUALSIZE: Image fits to its original size.
- PAPER: Image fits onto the paper selected for printing.

**Notes:**

- FIT is valid for graphical reports only.
- FIT WIDTH, FIT HEIGHT, FIT PAPER, and FIT ACTUALSIZE are mutually exclusive; only one of these commands can be executed per script command line.

## FONT

**Function:** Set the report font.

**Syntax:** FONT NAME 'name' STYLE 'style' SIZE n

- Parameters:
- name: Font name.
  - style: The following are valid: REGULAR, BOLD, ITALIC, and BOLDITAL
  - n: Point size of font.
- Notes:
- Some fonts support a limited number of point sizes.
  - Only fixed pitch fonts are supported.
- Example:
- Display 10 point Terminal font, bold face.  
FONT NAME 'Terminal' STYLE 'BOLD' SIZE 10

## FREEZE

- Function:
- Prevent scrolling of a portion of displayed text.
- Syntax:
- FREEZE CURMARK *or* FROM topleft bottomright  
ROW *or* COLUMN SAME *or* BOTH
- Parameters:
- CURMARK: Freeze current mark. Do not specify CURMARK if no text is selected. Do not specify both CURMARK and FROM.
  - FROM: Freeze the block of text specified by topleft/bottomright. Do not specify both FROM and CURMARK.
  - topleft: Specify the top or left corner of the area to freeze. When ROW is selected, topleft denotes the top row to freeze. When COLUMN is specified, topleft denotes the left-most column to freeze.
  - bottomright: Specify the bottom or right corner of the area to freeze. When ROW is selected, bottomright denotes the bottom row to freeze. When COLUMN is specified, bottomright denotes the right-most column to freeze.
  - ROW/COLUMN: Indicate the direction of the mark. ROW freezes all rows within the mark. COLUMN freezes all columns within the mark.
  - SAME: Frozen rows do not scroll up or down. Frozen columns do not scroll left or right.
  - BOTH: Frozen text does not scroll in either direction.
- Note:
- FREEZE fails if the selected text is not in view on the current window.
- Examples:
- Freeze rows marked with the mouse so they do not scroll up and down.  
FREEZE CURMARK ROW SAME
  - Freeze rows 6 to 9 so they scroll neither up and down nor left and right.  
FREEZE FROM 6 9 ROW BOTH

## GOTO

- Function:** Display a specified section, page, and sub-page.
- Syntax:**
- To display a specific page in a report:  
GOTO [RELATIVE] PAGE pagenumber [SECTIONID 'sectionid'] [SUBPAGE subpagenumber]
  - To display a specific sub-page in a multi-page image:  
GOTO [RELATIVE] [PAGE pagenumber [SECTIONID 'sectionid']] SUBPAGE subpagenumber
- Parameters:**
- **RELATIVE:** Move relative to the current page. A negative number moves backward in the report. When used in conjunction with SUBPAGE, moves relative to the current sub-page.
  - **pagenumber:** Page number.
  - **sectionid:** Name of the section containing the page you wish to view. This parameter is not valid for reports identified by a DOS path and filename.
  - **subpagenumber:** Sub-page number of a multi-page image.
- Examples:**
- Go to page five of document server report section AAC100.  
GOTO PAGE 5 SECTIONID 'AAC100'
  - Go forward four pages.  
GOTO RELATIVE PAGE 4
  - Go backward one sub-page.  
GOTO RELATIVE SUBPAGE -1

## HIDE

- Function:** Remove a block from view.
- Syntax:** HIDE [TOP] [LEFT] [RIGHT] [BOTTOM] CURMARK  
or FROM row col width height
- Parameters:**
- **TOP/LEFT/RIGHT/BOTTOM:** Extend the mark to the margin in the specified direction.
  - **CURMARK:** Hide text currently marked.
  - **row col:** Upper left corner of block to hide.
  - **width height:** Width and height of block to hide.
- Note:** CURMARK and FROM are mutually exclusive.
- Examples:**
- Hide marked text, extending the mark to the right side of the page.  
HIDE RIGHT CURMARK
  - Hide a block starting at row 5, column 1, that is 5 columns wide and 10 columns high.  
HIDE FROM 5 1 5 10



# MOBIUS

# DocumentDirect 2.2

**Function:** Selects the policy to identify fields in a report.

**Syntax:** `LOADPOLICY 'policyname'`

**Parameters:** `policyname`: Name of file where the policy is stored. If the file is not in the current directory, specify the full path and file name.

**Notes:** A report must be open before specifying `LOADPOLICY`.

**Example:** Load a policy file named `DAILY.PLC` from the `POLICIES` directory.  
`LOADPOLICY 'C:\POLICIES\DAILY.PLC'`

## MARK

**Function:** Select a block to be manipulated by specifying coordinates that describe the block.

**Syntax:** `MARK FROM row1 col1 TO row2 col2`

**Parameters:**

- `row1 col1`: Row/column coordinates for upper left corner of the block.
- `row2 col2`: Row/column coordinates for lower right corner of the block.

**Note:** All coordinates are relative to the current origin.

**Example:** Mark column1 in rows 7-9.  
`MARK FROM 7 1 TO 9 1`

## MARKANCH

**Function:** Mark text from a dropped anchor to the current caret position.

**Syntax:** `MARKANCH`

**Parameters:** None.

**Note:** `MARKANCH` generates an error if the anchor has not been dropped.

## MOVE

**Function:** Move a block to another location on the page.

**Syntax:** `MOVE [TOP] [LEFT] [RIGHT] [BOTTOM]`  
`CURMARK or FROM row1 col1 width height`  
`TOCARET or TOPOS row2 col2`

**Parameters:**

- `TOP/LEFT/RIGHT/BOTTOM`: Extend the mark to the margin in the specified direction.
- `CURMARK`: Move text currently marked.
- `row1 col1`: Upper left corner of area to move.
- `width height`: Width and height of area to move. Width and height have a minimum value of 1.
- `TOCARET`: Text appears at current caret location.
- `row2 col2`: Row and column where moved text should appear. The upper left corner of the block appears at these coordinates.

# MOBIUS

# DocumentDirect 2.2

- Note:
- CURMARK and FROM are mutually exclusive.
  - TOCARET and TOPOS are mutually exclusive.
- Examples:
- Move text already marked to the current caret location.  
MOVE CURMARK TOCARET
  - Move a block of text 5 columns wide and 10 rows high, starting at row/column 1,1 to row 20, column 1.  
MOVE FROM 1 1 5 10 TOPOS 20 1
  - Move the top 10 rows and first 10 columns of the report to row 20, column 1.  
MOVE RIGHT FROM 1 1 10 10 TOPOS 20 1

## MULTIVIEW

- Function: Specify how multi-page images are displayed.
- Syntax: MULTIVIEW COMPOUND Y *or* N
- Parameters:
- Y: Concatenate all sub-pages of a multi-page image into a "compound" page and display as a single page.
  - N: Display the sub-pages of a multi-page image as individual pages.
- Example: Display sub-pages of a multi-page image as individual pages.  
MULTIVIEW COMPOUND N

## OPENTOPIC

Function: Open a report by topic.

Syntax: OPENTOPIC SERVERID 'serverid' TOPICNAME  
'topicname' [TOPICVERSIONID 'topicversionid']  
[TOPICITEM 'topicitem'] [REPORTID 'reportid']  
[VERSIONID 'versionid'] [SECTIONID 'sectionid']  
[EXACTTOPICITEM]

- Parameters:
- serverid: Document Server ID.
  - topicname: Topic to open. If you specify a partial topic name, the first topic name matching the partial topic name is opened.
  - topicversionid: Topic version to open, in the format YYYYMMDDHHMMSS. If you specify a partial ID, the first topic version matching the partial ID is opened. If you omit topicversionid, OPENTOPIC opens the latest topic version on the document server.
  - topicitem: Topic item to open. If you specify a partial topic item, the first topic item matching the partial topic item is opened. If you omit topicitem, OPENTOPIC defaults to the first topic item for the specified topic version.
  - reportid: Report to open. If you specify a partial ID, the first Report ID matching the partial ID is opened. If you omit reportid, OPENTOPIC opens the first report on the document server.
  - versionid: Report version to open, in the format YYYYMMDDHHMMSS. If you specify a partial ID, the first Version ID matching the partial ID is opened. If you omit versionid, OPENTOPIC opens the latest version.
  - sectionid: Report section to open. If you specify a partial ID, the first Section ID matching the partial ID is opened. If you omit sectionid, OPENTOPIC opens the first section.
  - EXACTTOPICITEM: The specified topicitem must match exactly an existing topic item name, or OPENTOPIC does not open a report.

**Note:** To open a specific page in the section, record and save a script that opens the report to the desired page. Print a copy of the script and write down the 45-character string including any blanks that appear as the sectionid in the OPENTOPIC command. When creating the OPENTOPIC script command, use that 45-character string as the sectionid.

- Examples:
- Open a report using the latest report and topic version for the topic name PRODUCTS.  
OPENTOPIC SERVERID 'HLLAPI A' TOPICNAME 'PRODUCTS'
  - Open a report using the latest report and topic version from September 1994 with topic name "PRODUCTS."  
OPENTOPIC SERVERID 'HLLAPI A' TOPICNAME 'PRODUCTS' TOPICVERSIONID '199409'
  - Open a report using the first topic item that starts with the letter D in the latest report and topic version from September 1994 with topic name PRODUCTS.  
OPENTOPIC SERVERID 'HLLAPI A' TOPICNAME 'PRODUCTS' TOPICVERSIONID '199409' TOPICITEM 'D'
  - Open a report using the latest report and topic version from September 1994 with topic name PRODUCTS and known topic item name MANUEAOAK.  
OPENTOPIC SERVERID 'HLLAPI A' TOPICNAME 'PRODUCTS' TOPICVERSIONID '199409' TOPICITEM 'MANUEAOAK' EXACTTOPICITEM

## OPENVIEW



- Function:** Open a document window.
- Syntax:**
- To access reports from a ViewDirect for MVS or ViewDirect for Networks document server:  
OPENVIEW SERVERID 'serverid' [REPORTID 'reportid'] [VERSIONID 'versionid'] [SECTIONID 'sectionid'] [PAGE pagenumber]
  - To access ViewDirect for Networks stand-alone document server files:  
OPENVIEW SERVERID 'serverid' REPORTID 'archivefile' [SECTIONID 'sectionid'] [PAGE pagenumber]
  - To access files identified by a DOS path and filename:  
OPENVIEW REPORTID 'reportname' [PAGE pagenumber]
- Parameters:**
- **serverid:** Document Server ID. If you omit serverid, OPENVIEW treats the Report ID as a file identified by a hard drive letter.
  - **reportid:** ID of the report to open. If you omit reportid, OPENVIEW opens the first report on the document server. To retrieve the first Report ID with a specific prefix, specify only the prefix.
  - **versionid:** Report version to open, in the format YYYYMMDDHHMMSS. If you omit versionid, OPENVIEW opens the latest version. To open the latest version of a specific prefix, specify only the prefix.
  - **sectionid:** Report section to open. If you omit sectionid, OPENVIEW opens the first section. To open the first section that contains a specific prefix, specify only the prefix.
  - **pagenumber:** Page number. If you omit pagenumber, OPENVIEW opens the first page.
  - **archivefile:** DAF to be opened by a ViewDirect for Networks stand-alone document server. If the file is not in the current directory, provide the complete file path and name.
  - **reportname:** File identified by a DOS path and filename. If the report is not in the current directory, provide the complete file path and name.
- Notes:** OPENVIEW lets multiple users share a single script file to connect to a common document server, while using each user's unique Recipient ID and password to open reports because each user's Recipient ID and password can be specified in the Edit Document Server dialog. See "Managing Document Servers" for details.
- Examples:**
- Open file C:\MOBIUS\DDR\REPORTS\SL001.RPT.  
OPENVIEW REPORTID 'C:\MOBIUS\DDR\REPORTS\SL001.RPT'
  - Open the first section of the latest version in September 1994 for the report SL001.  
OPENVIEW SERVERID 'HLLAPI A' REPORTID 'SL001' VERSIONID '199409'

# MOBIUS

PAUSE

# DocumentDirect 2.2

**Function:** Pauses script execution until a key is pressed or a delay time is reached.

**Syntax:** PAUSE [delay time]

**Parameters:** delay time: Specify duration of pause, in whole seconds. If no time is specified, PAUSE waits indefinitely for you to select NEXT.

**Note:** Remaining delay time is ignored if you select NEXT.

**Example:** Pause current script for 10 seconds.  
PAUSE 10

## PLAYBACK

**Function:** Load and execute a script.

**Syntax:** PLAYBACK 'filename'

**Parameters:** filename: Name of the script to run. If the script is not in the current directory, give full path and filename.

**Note:** Script files do not support recursion; you may not have script A play script B which in turn plays script A.

**Example:** PLAYBACK 'C:\SCRIPTS\DAILY.MSL'

## PRINT

**Function:** Print specified pages of a report.

**Syntax:** PRINT COPIES cnum ANNOTATE TRUNCATE *or* TILE *or* FITBEST ALL *or* CURSEC *or* CURPAGE *or* FROM first TO last SUBPAGES

**Parameters:**

- ALL: Print entire report.
- ANNOTATE: Print annotations with the report.
- cnum: Number of copies to print.
- CURSEC: Print all pages in the current section.
- CURPAGE: Print displayed page.
- FITBEST: Scale report to fit page. The report is scaled so that it fills as much of the printed page as possible.
- first: First page to print.
- last: Last page to print.
- SUBPAGES: Print sub-pages of multi-page images, including the constant backforms of AFP images.
- TILE: Print overflow data on tiled pages. See Chapter 4 for information about overflow data and tiled pages.
- TRUNCATE: Truncate overflow data.

**Notes:**

- Pages print as they are formatted in the current view.
- PRINT is invalid if no report is open.
- During script recording, save the script after adding annotations and before using the PRINT function. This ensures that the commands are sequenced properly in the script file.

Example: Print three copies of the current page.  
PRINT COPIES 3 CURPAGE

## RAISANCH

Function: Remove the anchor.

Syntax: RAISANCH

Parameters: None.

Note: RAISANCH generates an error if the anchor has not been dropped or if no report is open.

## RESIZE

Function: Enlarge or reduce the size of a graphical or text report page, centering either marked data or the part of the page in the viewing area.

Syntax: RESIZE ENLARGE *or* REDUCE

Parameters:

- ENLARGE: Enlarge a graphical report page by 25% or enlarge a text report page by increasing the font to the next point size.
- REDUCE: Reduce a graphical report page by 20% or reduce a text report page by decreasing the font to the next smaller point size.

Examples:

- RESIZE ENLARGE
- RESIZE REDUCE

## RETURN

Function: Exit the current script.

Syntax: EXIT [DELETESCRIPT]

Parameters:

- DELETESCRIPT: Delete the script file when exiting DocumentDirect.

Notes:

- If the script containing RETURN was run by another script using the PLAYBACK command, control returns to the previous script.
- RETURN prevents a script from executing any steps following RETURN.

Example: Exit this script without performing any further actions.  
OPEN LOCAL  
'K:\RDSWIN\1.3\REPORTS\SL001.RPT'  
FIND 'planned'  
PAUSE 10  
RETURN

## ROTATE

- Function: Rotate displayed images.
- Syntax: ROTATE arguments
- Parameters: arguments:
- 0: Display image in its original orientation.
  - 90: Rotate image counter-clockwise 90 degrees.
  - 180: Rotate image counter-clockwise 180 degrees.
  - 270: Rotate image counter-clockwise 270 degrees.
- Notes:
- Rotate is valid for image files only.
  - Rotate images before using annotation-related script commands to add or edit annotations.
- Example: Rotates the displayed image counter-clockwise 270 degrees from its original orientation.  
ROTATE 270

## RUN

- Function: Run an external program or batch file.
- Syntax: RUN 'file.ext [arguments]'
- Parameters:
- file.ext: File to execute. If the program is not in the current path, the complete file path and name must be specified.
  - arguments: Arguments that should be passed to the executed program. These arguments are specific to the program being started.
- Note: Scripts do not automatically wait for RUN to complete before continuing. If you need the RUN command to execute completely before continuing, issue a PAUSE script command.
- Example: Run Excel, and open file C:\DATA\FRIDAY.CSV.  
RUN 'K:\EXCEL\EXCEL.EXE  
C:\DATA\FRIDAY.CSV'

## SCALE

Function: Change the width and height of a graphical report.

Syntax: SCALE percent

Parameters: • percent: Percentage of actual size to display.

Notes:

- 100% scaling displays the image at its actual size.
- SCALE is only available for graphical reports.
- Scale graphical reports before using annotation-related script commands to add or edit annotations.

## SCOPE

- Function:** Specify the portion of a report that should be addressed by a DDE link.
- Syntax:** SCOPE ALL *or* CURSEC *or* CURPAGE *or* FROM first TO last
- Parameters:**
- ALL: Address entire report.
  - CURSEC: Address all pages in the current section.
  - CURPAGE: Address displayed page only.
  - first: First page the DDE link should address. Must be at least 1.
  - last: Last page the DDE link should address. Must be equal to or greater than first.
- Note:** SCOPE is relevant only to data sent to client applications via DDE links.
- Example:** Assign the current page only to a DDE link.  
SCOPE CURPAGE

## SCRNPOS

- Function:** Position the current view.
- Syntax:** SCRNPPOS row col [RELATIVE]
- Parameters:**
- row: Number of the row that should appear at the top of the screen.
  - col: Number of the column that should appear at the left of the screen.
  - RELATIVE: Row and column position are determined from the current display position.
- Examples:**
- Position the view so that row 6, col 10 appears at upper left corner of window.  
SCRNPPOS 6 10
  - Position the view so that 6 rows down and 10 columns right appear at upper left corner of window.  
SCRNPPOS 6 10 RELATIVE

## SEND

- Function:** Create an OPENVIEW script that opens the current report page and attaches it to an E-mail message.
- Syntax:** SEND [ANNOTATE]
- Parameter:** ANNOTATE: Enable annotation in the E-mail script.
- Example:** Create a script that opens the active report to the current page, displaying any annotations on that page.  
SEND ANNOTATE

**Note:** The SEND script command is invoked automatically when you select **File|Send** from an active report window. The ANNOTATE parameter is only called when DocumentDirect is set to display annotations.

## SETORIGN

- Function: Set the origin at the current caret position. All commands with positioning parameters now use this as location 1,1.
- Syntax: SETORIGN [RESET]
- Parameter:
  - RESET: Set the origin at the top left corner of the page.
- Note: When a report opens, the origin is set at the top left corner.
- Examples:
  - Set the origin at the current caret position.  
SETORIGN
  - Set the origin at the top left corner of the displayed page.  
SETORIGN RESET

## SWITCH

- Function: Set the active window.
- Syntax: SWITCH 'windowname'
- Parameter: windowname: The name of the window as it appears on the title bar.
- Note: If multiple windows open on the same report, denote the window to switch to by 'n' (where n is the window number).
- Example: Activate the second window on 1QUARTER.RPT. If only one occurrence of that window exists, that window becomes the active window.  
SWITCH 'C:\1QUARTER.RPT:2'

## UNLOADPOLICY

- Function: Unload the current policy.
- Syntax: UNLOADPOLICY
- Parameters: None.

## UNMARK

- Function: Remove the current mark.
- Syntax: UNMARK
- Parameters: None.
- Note: If no text is currently marked, UNMARK has no effect.





## Chapter 6. Creating Policies

---

### Introduction

This chapter includes the following:

- What policies are
- Illustration of a sample report and its corresponding policy
- Procedures for creating and editing policies
- Explanation of the windows, dialogs, and context menus used when working with policies
- Examples of policies extracting data from various types of reports

### Contents

What is a Policy?

Sample Report and Policy

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Visual Parser Reference

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Field Window

Group Window

Sample Window

Examples of Creating Policies

Sample Policy for a Character Report

Sample Policy for an LPFD Report with Metadata

### ***What is a Policy?***

---

A policy is a set of field-specific criteria that DocumentDirect uses to locate and extract data from pages in LPFD and character reports. Policies can locate and extract:

- Data
- Constants, such as column headings
- Metadata, that is, data about the report data that is not located on the report but is associated with the report

You use DocumentDirect's Visual Parser to create, edit, and save policies, and to extract data. An individual policy can be saved to file with a PLC file extension and re-used.

Reasons for using policies to extract data from report archives include the following:

- Immediately verify the accuracy of field definitions and extract criteria – DocumentDirect lets you preview the data extracted using the policy.
- Eliminate repetitive work –
  - ♦ A single policy can be used to extract data from different reports, providing they have a similar format.
  - ♦ A single policy can be used to extract discrete subsets of data from a single report, and you can export each subset individually to different software applications, and to different output files with different file formats.
- Extract data from LPFD reports – Policies allow you to use logical coordinates to locate and extract data from LPFD reports.
- Extract metadata – Policies allow you to extract metadata associated with a report.
- Substitute values – During the extraction process, policies allow you to replace the actual content of a field with a value you select.

This extracted data can then be exported via different processes and in a number of different file formats. DocumentDirect's export function is described in Chapter 7. DocumentDirect's scripting capabilities, which allow you to automate data extraction and export using policies, are described in Chapter 5.

## ***Sample Report and Policy***

---

The best way to understand what a policy is and the steps necessary to create one is to look at a sample.

The purpose of the sample policy is to extract the report date ❶ and the total actual year-to-date revenue amount ❷ for a particular office ❸ from a monthly revenue report. Figure 6-1 illustrates the sample report. Figure 6-2 illustrates the completed policy and, in the Sample Window, the data extracted by the policy.

**DocumentDirect**  
File Edit View Script Policy Options Window Help

**mobiust: AC001 (19991231000001)**

01/16/84 **1**  
REPORT ID: AC001  
DEPARTMENT: MANU MANUFACTURING  
REGION: EA EASTERN  
OFFICE: NWK **2** NEWARK, NEW JERSEY

MONTHLY EXPENSE

| ACCT CODE              | ACCT DESCRIPTION         | PLANNED MTD | ACTUAL MTD | VARIANCE MTD | PLANNED YTD | ACT YTD |
|------------------------|--------------------------|-------------|------------|--------------|-------------|---------|
| 820001                 | DATA PROCESSING          | 1,710       | 3,048      | 1,338        | 16,501      | 2       |
| 830001                 | ELECTRICITY              | 2,024       | 3,607      | 1,584        | 19,532      | 3       |
| 835000                 | EMPLOYEE BENEFITS        | 2,935       | 5,231      | 2,297        | 28,325      | 5       |
| 840001                 | EQUIPMENT RENTALS        | 797         | 1,421      | 624          | 7,697       | 1       |
| 860001                 | OFFICE SUPPLIES          | 99          | 177        | 78           | 959         |         |
| 865001                 | POSTAGE, FREIGHT, ETC.   | 1,506       | 2,685      | 1,179        | 14,537      | 2       |
| 935001                 | TELEPHONE & TELEGRAPH    | 996         | 1,775      | 779          | 9,610       | 1       |
| 950001                 | RAW MATERIALS            | 3,312       | 5,903      | 2,592        | 31,964      | 5       |
| 960001                 | DEPRECIATION             | 1,247       | 2,223      | 976          | 12,035      | 2       |
| 970001                 | MACHINE TOOL CONSUMABLES | 917         | 1,635      | 718          | 8,851       | 1       |
| 980001                 | RENT                     | 1,055       | 1,881      | 826          | 10,188      | 1       |
| OFFICE TOTAL: <b>3</b> |                          | 21,200      | 37,791     | 16,591       | 204,626     | 37      |

Section: MANUEANWK Pg 1 of 1

Figure 6-1. Sample Report Displayed in DocumentDirect Window

DocumentDirect - [mobiust: AC001 (19991231142699)]

File Edit View Script Policy Options Window Help

01/16/84

REPORT ID: AC001  
DEPARTMENT: MANU MANUFACTURING  
REGION: EA EASTERN  
OFFICE: NWK NEWARK, NEW JERSEY

MONTHLY EXPENSE

| ACCT CODE | ACCT DESCRIPTION       | PLANNED MTD | ACTUAL MTD | VARIANCE MTD | PLANNED YTD | ACTU YTD |
|-----------|------------------------|-------------|------------|--------------|-------------|----------|
| 820001    | DATA PROCESSING        | 1,710       | 3,048      | 1,338        | 16,501      | 29       |
| 830001    | ELECTRICITY            | 2,024       | 3,607      | 1,584        | 19,532      | 35       |
| 835000    | EMPLOYEE BENEFITS      | 2,935       | 5,231      | 2,297        | 28,325      | 51       |
| 840001    | EQUIPMENT RENTALS      | 797         | 1,421      | 624          | 7,697       | 13       |
| 860001    | OFFICE SUPPLIES        | 99          | 177        | 78           | 959         | 1        |
| 865001    | POSTAGE, FREIGHT, ETC. | 1,506       | 2,685      | 1,179        | 14,537      | 26       |

Field Window

- Level 1
  - REPORT\_DATE ①
    - Date, format "MM/DD/YY"
    - starts in row 1, column 1
  - OFFICE\_CODE ②
    - Fixed length text, length 3
    - starts in row 5, column 17
  - OFFICETOTAL ③
    - Fixed length text, length 13
  - ACT\_YTD ④
    - Number, max length 15
    - starts in column 98
    - is after OFFICETOTAL, on the same row

Group Window

- ActYTD
  - REPORT\_DATE ①
  - ACT\_YTD ④

Sample

01/16/84 370539

Section: MANUEANWK Pg 1 of 1 Policy: UG\_sample

Figure 6-2. Sample Policy Displayed in Visual Parser Window

### General Steps for Creating a Policy

The following steps describe, in general, how to create a policy. See "Creating a Policy and Extracting Data" and "Editing a Policy" for complete instructions on the steps to take when working with policies. For detailed, step-by-step examples, see "Examples of Creating Policies."

1. Open the report and the Visual Parser window.
2. Decide what fields to extract from the report and consider what kind of extract criteria is relevant to each field.
3. Use the Field Settings dialog to create a field definition for each field. Creating the

field definition includes assigning a field name and defining specific extract criteria for the field.

Field definition creation goes more smoothly if you define the fields that depend on other fields last. For example, in the sample policy, the report date ❶, office code ❷, and "OFFICE TOTAL" label ❸ are defined first. Then the total actual year-to-date revenue amount ❹ is defined, and the dependency between the amount and the "OFFICE TOTAL" label is established.

4. Establish the output sequence of the fields using the Group Window, and use the Sample Window to determine if the displayed output is correct.
5. Save the policy to a file.

### *Determining Extract Criteria to Use*

The extract criteria you incorporate into the policy depends on the report on which the policy is based. The table below illustrates the similarities between the fields on the sample report and the extract criteria for those fields in the sample policy. Once these similarities are recognized and understood, it is easy to determine what extract criteria to use when creating policies.

| Item | Contents of the Field on the Sample Report | Characteristics of the Field on the Sample Report                                                                                                                                                     | Characteristics of the Sample Policy Extract Criteria for the Field                                                                                                                                                                                                |
|------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ❶    | 01/16/84                                   | The report date appears once on the report, always appears in the same format, and starts in the first column and first row.                                                                          | The report date is in MM/DD/YY format, starts in column 1 and row 1, and occurs once on the report page.                                                                                                                                                           |
| ❷    | NWK                                        | The 3-character office code always starts in the 17th column on the 5th row of the report. "NWK" is the office code of the office whose revenue figure is to be extracted.                            | The office code is a 3-character fixed length text field that starts in column 17 and row 5, and occurs once on the report page. The office code must be equal to "NWK."                                                                                           |
| ❸    | OFFICE TOTAL                               | The office's total actual year-to-date revenue does not always appear in the same row, but does always appear on the same row as, and to the right of, the only instance of the "OFFICE TOTAL" label. | The OFFICE TOTAL label is defined so it can be used to locate the actual year-to-date revenue amount. The label is a fixed length text field that is 13 characters. The label occurs once on the report page, and must be equal to the text string "OFFICE TOTAL." |

| Item | Contents of the Field on the Sample Report | Characteristics of the Field on the Sample Report                                 | Characteristics of the Sample Policy Extract Criteria for the Field                                                                                                                                                                                            |
|------|--------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ④    |                                            | The office's total actual year-to-date revenue amount always starts in column 98. | The actual year-to-date revenue amount is a numeric field that is no longer than 15 characters and starts in column 98. The revenue amount always appears on the same row as, and to the right of, the OFFICE TOTAL label, and occurs once on the report page. |

### ***Creating a Policy and Extracting Data***

---

The **Field Settings Dialog Style** option on the Policy tab of the Preferences dialog (select **Options|Preferences** on the DocumentDirect menu bar) determines whether the Field Settings dialog is displayed as a tabbed dialog or as a wizard when creating a new policy or adding new fields to a policy. See "Policy Options" in Chapter C1, "Setting User Preferences" for more information. The following instructions assume the wizard is in use.

The following steps describe how to create a policy and extract data. For detailed reference information about each window and panel, see the "Visual Parser Reference" section later in this chapter.

1. Open the report for which you want to create a new policy.
2. Click the **Policy Edit/Create** button on the DocumentDirect toolbar to start the Visual Parser. The Visual Parser window is displayed inside the DocumentDirect application window as shown in Figure 6-3.

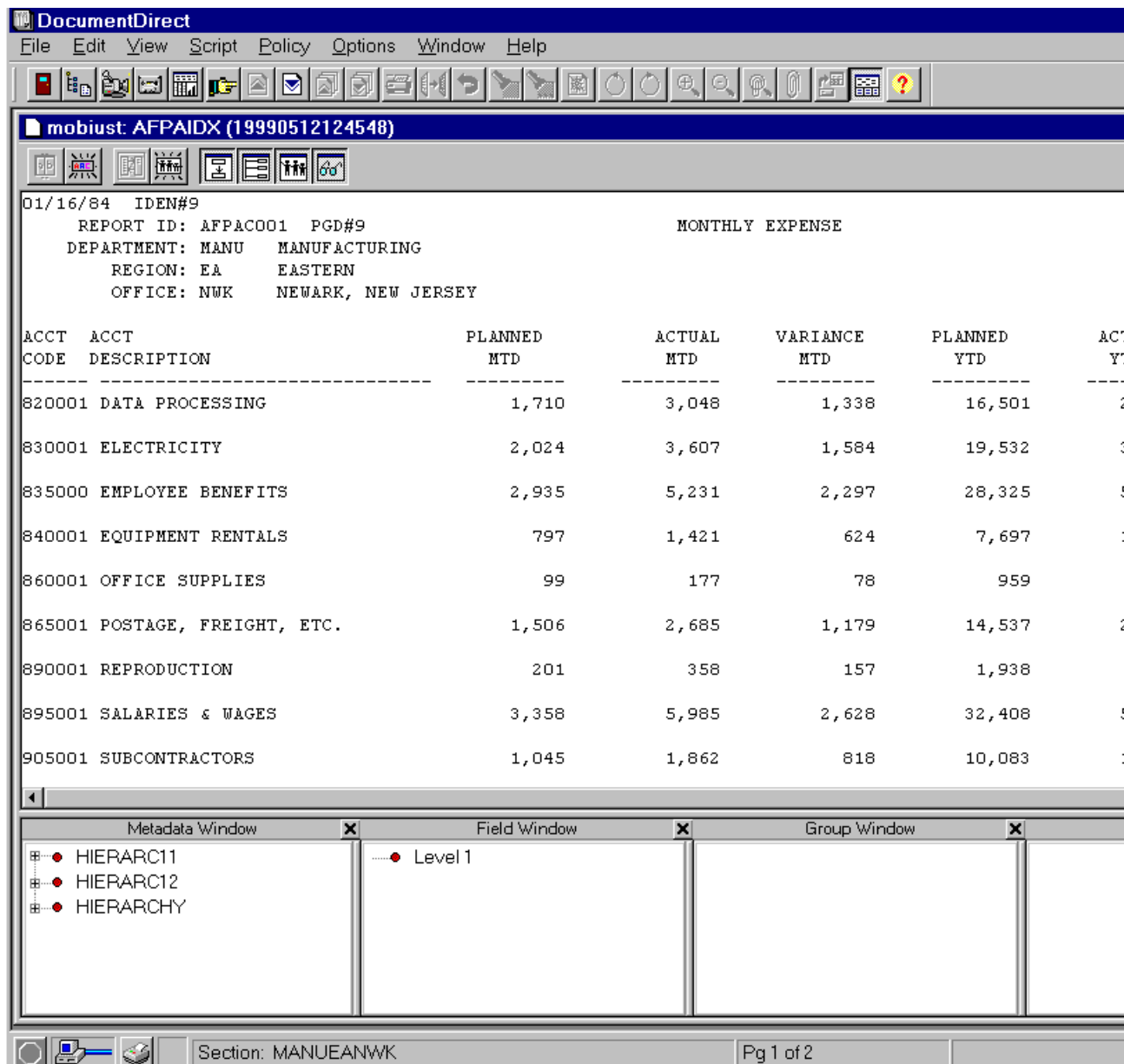


Figure 6-3. Visual Parser Window

The Policy toolbar, as shown in Figure 6-4, appears right above the report. See "Policy Toolbar" in the "Visual Parser Reference" section of this chapter for information.

If necessary, use the Metadata Window, Field Window, Group Window and Sample Window buttons on the Policy toolbar to open those windows in the bottom portion of the Visual Parser windows. See "Metadata Window," "Field Window," "Group Window," and "Sample Window" in "Visual Parser Reference" for a detailed explanation of these windows.





*Figure 6-4. Policy Toolbar*

3. The following steps describe how to add a field to a policy and define the extract criteria for the field. The fields you define are those fields whose contents you want to extract. When the contents of the report matches the policy extract criteria, the data is extracted.
  - a. In the Visual Parser window, highlight the field on the report that you want to extract, then click the **Add Field** button on the Policy toolbar. The General panel is displayed as shown in Figure 6-5. On the General panel you assign a name to the field and indicate the type of data contained in the field. See "General Panel" in the "Visual Parser Reference" section of this chapter for detailed instructions on using this panel.

Field Wizard

(Required) Enter the name of the field. It must begin with a letter and contain only letters and numbers.

Field Name  
REPORT\_DATE

Field Data Type

Currency  
Date  
Fixed Length Text  
Number  
Variable Length Text  
Metadata

(Optional) Specify using of the logical coordinates (LPFD only).

☐ Use Logical Coordinates

Next > Cancel Help

*Figure 6-5. General Panel*

Enter or select the appropriate options, then click **Next**.

- b. The Attributes panel is displayed. The version of the Attributes panel that is displayed depends on the **Field Data Type** you selected. The Attributes panel allows you to define field lengths, values, and format. See "Currency Attributes Panel," "Date Attributes Panel," "Fixed Length Text Attributes Panel," "Number Attributes Panel," "Variable Length Text Attributes Panel," and "Metadata Attributes Panel" for detailed explanations of the data attributes related to each **Field Data Type** and how to use the Attributes

panel. Figure 6-6 illustrates the Date Attributes panel.

The screenshot shows the 'Field Wizard' window with the 'Date Attributes' panel selected. The panel is divided into several sections:

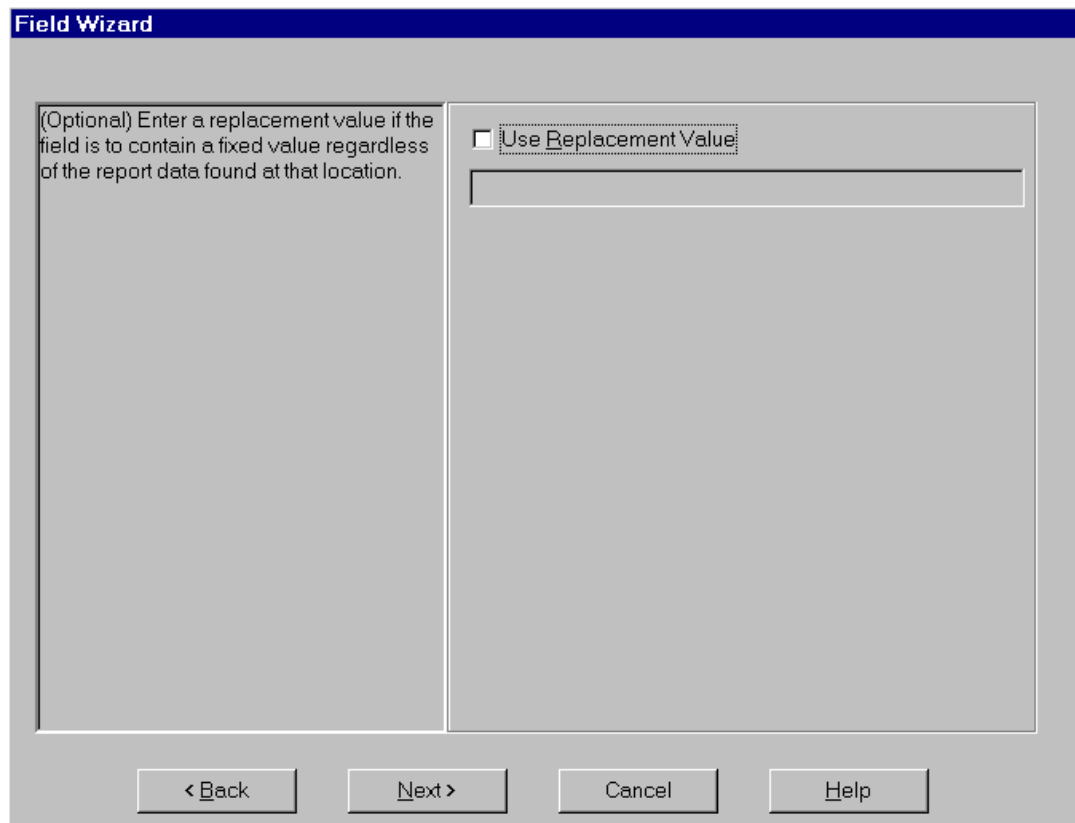
- (Optional) Select if the field can contain all spaces.** This section contains a checkbox labeled 'Allow Blank Fields' which is currently unchecked.
- (Required) Select the specified date format.** This section contains a 'Date Format' dropdown menu with 'MM/DD/YY' selected.
- (Optional) The Match Date List can be used to include or exclude specific dates. Select the appropriate option for using the date list. If the field is to be constrained, enter the dates into the date list.** This section contains three radio buttons: 'Don't use date list' (selected), 'Don't match any date in list', and 'Match any date in list'. Below these are three input boxes for 'MM', 'DD', and 'YYYY' with an 'Add ==>' button to the right. Below the input boxes is a 'Remove <==>' button. To the right of these buttons is a 'Match Date List' box containing the date '10/09/99'.
- (Optional) Enter the maximum and/or minimum date for the field.** This section contains two checkboxes: 'Minimum date:' and 'Maximum date:'. Below each checkbox are three input boxes for 'MM', 'DD', and 'YYYY'.

At the bottom of the window are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

Figure 6-6. Date Attributes Panel

Enter or select the appropriate options, then click **Next**.

- c. The Replacement panel is displayed as shown in Figure 6-7. It allows you to substitute different data for the actual data found on the report page. See "Replacement Panel" for instructions on using this panel.



*Figure 6-7. Replacement Panel*

Select the option, enter the appropriate data, then click **Next**.

- d. The Dependencies panel is displayed as shown in Figure 6-8. It allows you to define the position of the field on the report. The Dependencies panel does not appear if the field you are adding is a metadata field. See "Dependencies Panel" for an explanation of dependencies and detailed instructions on using this panel.

(Optional) If the field is found in a specific position, check the appropriate box and set the column and/or row position. Check the 'Once Per Page' box to indicate that the field occurs only once per page.

(Optional) Add dependencies to the field by pressing the Add button. To change the dependency, select the field from the field column and then select the dependency from the dependency column.

☒ Use Fixed Column      Column      1

☒ Use Fixed Row      Row      1

☐ The Field Only Occurs Once Per Page

| Field | Dependency |
|-------|------------|
|-------|------------|

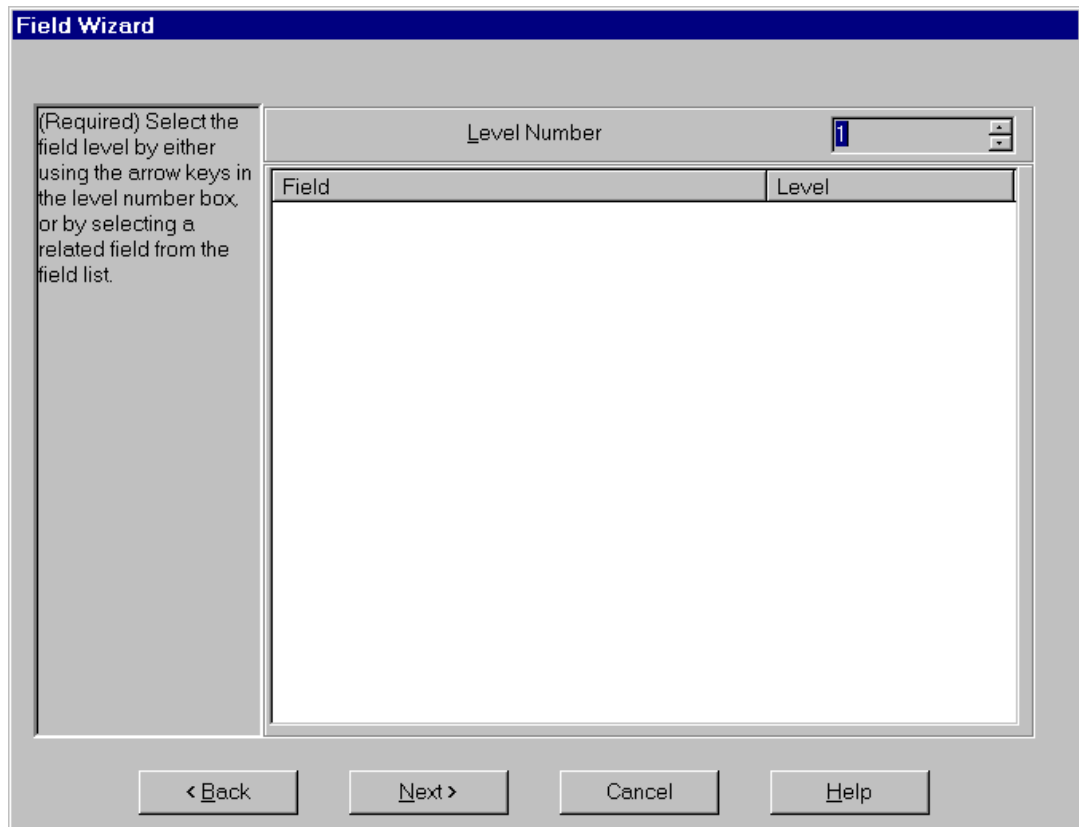
Add      Remove

< Back      Next >      Cancel      Help

Figure 6-8. Dependencies Panel

Enter or select the appropriate options, then click **Next**.

- e. The Level panel is displayed as shown in Figure 6-9. It allows you to define the relative hierarchical relationship of this field to other fields in the policy. See "Level Panel" for a detailed explanation of levels and instructions on using this panel.



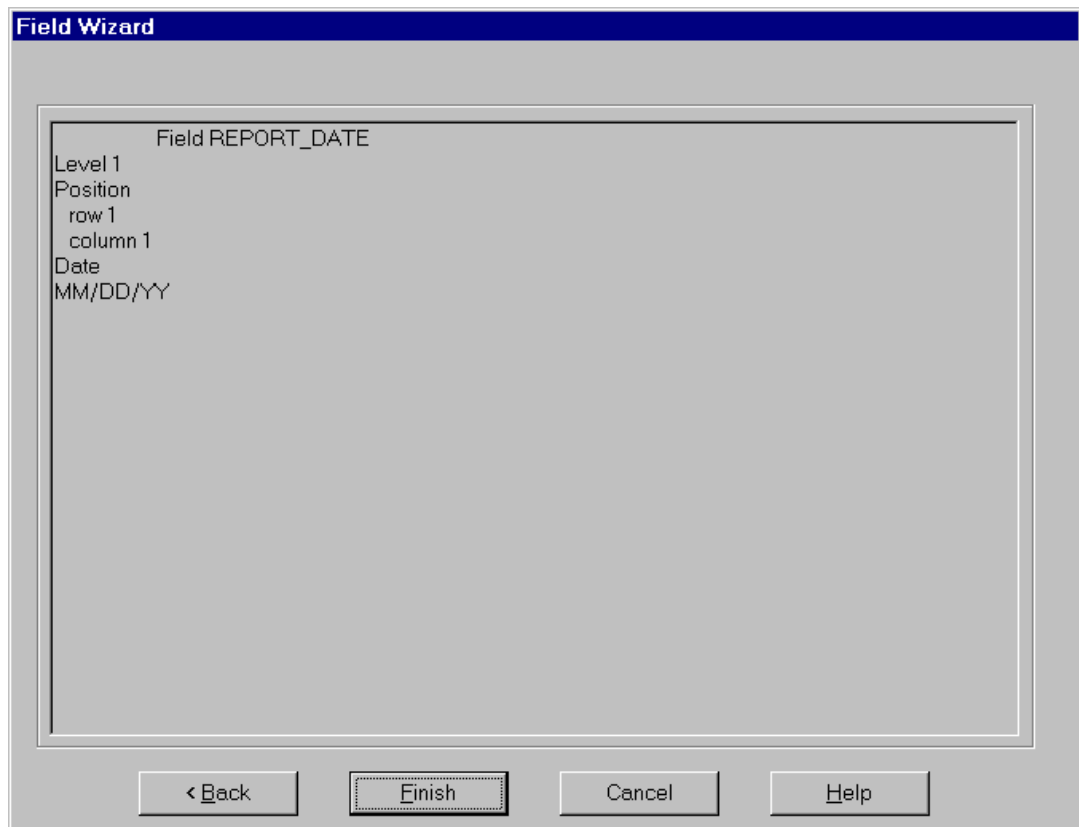
The image shows a software window titled "Field Wizard". On the left, a text box contains the instruction: "(Required) Select the field level by either using the arrow keys in the level number box, or by selecting a related field from the field list." To the right of this text is a "Level Number" spinner box with the value "1". Below these is a table with two columns: "Field" and "Level". The table is currently empty. At the bottom of the window are four buttons: "< Back", "Next >", "Cancel", and "Help".

| Field | Level |
|-------|-------|
|-------|-------|

Figure 6-9. Level Panel

Enter or select the appropriate options, then click **Next**.

- f. The Summary panel is displayed as shown in Figure 6-10. It displays all of the position information and extract criteria associated with the field. See "Summary Panel" for instructions on using this panel.



*Figure 6-10. Summary Panel*

g. Click **Finish**. The Visual Parser window is displayed as shown in Figure 6-11.

The screenshot shows the Visual Parser Window. At the top is a toolbar with icons for file operations and a status bar at the bottom showing 'Section: MANUEANWK' and 'Pg 1 of 2'.

The main report area displays the following data:

| 01/16/84 IDEN#9                |                        | MONTHLY EXPENSE |            |              |             |          |
|--------------------------------|------------------------|-----------------|------------|--------------|-------------|----------|
| REPORT ID: AFPAC001 PGD#9      |                        |                 |            |              |             |          |
| DEPARTMENT: MANU MANUFACTURING |                        |                 |            |              |             |          |
| REGION: EA EASTERN             |                        |                 |            |              |             |          |
| OFFICE: NWK NEWARK, NEW JERSEY |                        |                 |            |              |             |          |
| ACCT CODE                      | ACCT DESCRIPTION       | PLANNED MTD     | ACTUAL MTD | VARIANCE MTD | PLANNED YTD | ACTU YTD |
| 820001                         | DATA PROCESSING        | 1,710           | 3,048      | 1,338        | 16,501      | 29       |
| 830001                         | ELECTRICITY            | 2,024           | 3,607      | 1,584        | 19,532      | 35       |
| 835000                         | EMPLOYEE BENEFITS      | 2,935           | 5,231      | 2,297        | 28,325      | 51       |
| 840001                         | EQUIPMENT RENTALS      | 797             | 1,421      | 624          | 7,697       | 13       |
| 860001                         | OFFICE SUPPLIES        | 99              | 177        | 78           | 959         | 1        |
| 865001                         | POSTAGE, FREIGHT, ETC. | 1,506           | 2,685      | 1,179        | 14,537      | 26       |
| 890001                         | REPRODUCTION           | 201             | 358        | 157          | 1,938       | 3        |
| 895001                         | SALARIES & WAGES       | 3,358           | 5,985      | 2,628        | 32,408      | 58       |
| 905001                         | SUBCONTRACTORS         | 1,045           | 1,862      | 818          | 10,083      | 18       |
| 935001                         | TELEPHONE & TELEGRAPH  | 996             | 1,775      | 779          | 9,610       | 17       |

Below the report are three panels:

- Metadata Window:** Contains a tree view with nodes: HIERARC11, HIERARC12, and HIERARCHY.
- Field Window:** Contains a tree view with nodes: Level 1, and under Level 1: REPORT\_DATE, Date, format "MM/DD/YY", and starts in row 1, column 1.
- Group Window:** Currently empty.

Figure 6-11. Visual Parser Window

- h. Repeat steps a through g for each field to be added to the policy.
- If you need to add or delete levels, or move fields to different levels, in the Field Window, click the level or field to select it. With the cursor still on the level or field, right-click and select the appropriate Field Window context menu item. See "Field Window Context Menu" for a detailed explanation of the Field Window context menu.
  - The following steps describe how to add a group to a policy, and to add fields to the group. Each group contains a discrete subset of data to be extracted. Policies can contain multiple groups, each of which extracts a different subset of data from the report. The sequence of the fields in the group determines the sequence of fields in the extracted data. See "Group Settings Dialog" and "Group Window" for a detailed explanation of groups and instructions on using the window.

- a. Click the **Add Group** button on the Policy toolbar. The Group Settings dialog is displayed as shown in Figure 6-12 . It allows you to name the group and place fields in the group. See "Group Settings Dialog" for a detailed explanation of this dialog.

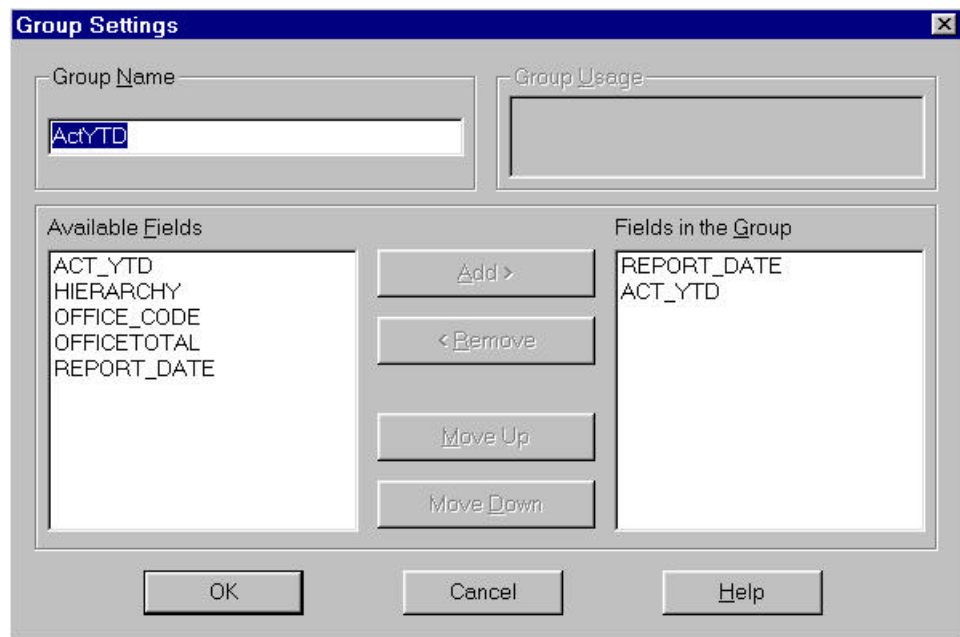


Figure 6-12. Group Settings Dialog

- b. Enter or select the appropriate options, then click **OK**. The new group appears in the Group Window. As soon as you create a group, the Sample Window displays the data extracted by that group, as shown in Figure 6-13.

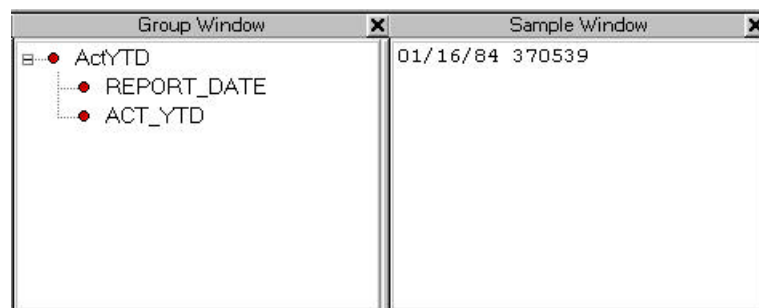


Figure 6-13. New Group Appears in Group Window;  
Extracted Data Appears in Sample Window

- c. Repeat steps a and b to add additional groups.
6. If you need to reorder the sequence of the fields within a group and change the sequence of the fields in the extracted data, in the Group Window, click the field you want to move. With the cursor still on the field, right-click and select the appropriate Group Window context menu item.
7. If you need to remove a field from a group, in the Group Window, click the field to



select it, then press the DEL key to remove it .

8. When you are satisfied with the extracted data sample displayed in the Sample Window, select the DocumentDirect **Policy|Save As** menu item to save the policy to a file.
9. Do one of the following:

| To...                                                                                          | Do This...                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Export the data displayed in the Sample Window to a CSV, SYLK, or XML file                     | <ol style="list-style-type: none"> <li>1. Select the DocumentDirect <b>File Export</b> menu item.</li> <li>2. Use the Export to File dialog to export the extracted data. See Chapter 7 for more information.</li> </ol>                                                                                                          |
| Export the data displayed in the Sample Window using DDE links                                 | See Chapter 7 for information.                                                                                                                                                                                                                                                                                                    |
| Close the Visual Parser window and exit from the Visual Parser                                 | Select the DocumentDirect <b>Policy Edit/Create</b> menu item.                                                                                                                                                                                                                                                                    |
| Create a new policy                                                                            | <ol style="list-style-type: none"> <li>1. Select the DocumentDirect <b>Policy Edit/Create</b> menu item to close the Visual Parser window.</li> <li>2. Select the DocumentDirect <b>Policy Unload</b> menu item to unload the current policy.</li> <li>3. Follow the steps in "Creating a Policy and Extracting Data."</li> </ol> |
| Edit a different policy                                                                        | <ol style="list-style-type: none"> <li>1. Select the DocumentDirect <b>Policy Edit/Create</b> menu item to close the Visual Parser window.</li> <li>2. Follow the steps in "Editing a Policy."</li> </ol>                                                                                                                         |
| Write a script that automatically opens a report, loads the policy, and exports extracted data | See Chapter 5 for information.                                                                                                                                                                                                                                                                                                    |

## ***Editing a Policy and Extracting Data***

When you edit fields in an existing policy, the Field Settings dialog is always displayed as a tabbed dialog.

The following steps describe how to edit a policy that was saved as a PLC file and extract data. For detailed reference information about each window and panel, see the "Visual Parser Reference" section later in this chapter.

1. Open the report for which the policy was created.

- Click the **Load Policy** button on the DocumentDirect toolbar. The Load Policy dialog is displayed. Navigate to the appropriate policy file and open it. The filename of the policy that was loaded appears in the lower right portion of the DocumentDirect status bar.
- Click the **Policy Edit/Create** button on the DocumentDirect toolbar to start the Visual Parser. The Visual Parser window is displayed as shown in Figure 6-14 with the Policy toolbar and open Metadata, Field, Group, and/or Sample Windows. See "Metadata Window," "Field Window," "Group Window," "Sample Window," and "Policy Toolbar" for information.

**DocumentDirect**  
File Edit View Script Policy Options Window Help

**mobius: AFPAIDX (19990512124548)**

01/16/84 IDEN#9  
REPORT ID: AFPAC001 PGD#9  
DEPARTMENT: MANU MANUFACTURING  
REGION: EA EASTERN  
OFFICE: NWK NEWARK, NEW JERSEY

| ACCT CODE | ACCT DESCRIPTION       | PLANNED MTD | ACTUAL MTD | VARIANCE MTD | PLANNED YTD | ACTUAL YTD |
|-----------|------------------------|-------------|------------|--------------|-------------|------------|
| 820001    | DATA PROCESSING        | 1,710       | 3,048      | 1,338        | 16,501      | 25,000     |
| 830001    | ELECTRICITY            | 2,024       | 3,607      | 1,584        | 19,532      | 30,000     |
| 835000    | EMPLOYEE BENEFITS      | 2,935       | 5,231      | 2,297        | 28,325      | 50,000     |
| 840001    | EQUIPMENT RENTALS      | 797         | 1,421      | 624          | 7,697       | 10,000     |
| 860001    | OFFICE SUPPLIES        | 99          | 177        | 78           | 959         | 1,000      |
| 865001    | POSTAGE, FREIGHT, ETC. | 1,506       | 2,685      | 1,179        | 14,537      | 20,000     |
| 890001    | REPRODUCTION           | 201         | 358        | 157          | 1,938       | 2,000      |
| 895001    | SALARIES & WAGES       | 3,358       | 5,985      | 2,628        | 32,408      | 50,000     |
| 905001    | SUBCONTRACTORS         | 1,045       | 1,862      | 818          | 10,083      | 15,000     |

Metadata Window: HIERARC11, HIERARC12, HIERARCHY  
Field Window: Level 1  
Group Window: ActYTD

Section: MANUEANWK Pg 1 of 2 Policy: UG\_sample

Figure 6-14. Visual Parser Window with a Loaded Policy

- Click the plus sign icons to expand levels, fields, and groups in each window. Select a group in the Group Window to display sample extracted data in the

Sample Window.

**DocumentDirect**  
File Edit View Script Policy Options Window Help

**mobiust: AFPAIDX (19990512124548)**

01/16/84 IDEN#9  
REPORT ID: AFPAC001 PGD#9 MONTHLY EXPENSE  
DEPARTMENT: MANU MANUFACTURING  
REGION: EA EASTERN  
OFFICE: NWK NEWARK, NEW JERSEY

| ACCT CODE | ACCT DESCRIPTION       | PLANNED MTD | ACTUAL MTD | VARIANCE MTD | PLANNED YTD | ACT YTD |
|-----------|------------------------|-------------|------------|--------------|-------------|---------|
| 820001    | DATA PROCESSING        | 1,710       | 3,048      | 1,338        | 16,501      | 2       |
| 830001    | ELECTRICITY            | 2,024       | 3,607      | 1,584        | 19,532      | 3       |
| 835000    | EMPLOYEE BENEFITS      | 2,935       | 5,231      | 2,297        | 28,325      | 5       |
| 840001    | EQUIPMENT RENTALS      | 797         | 1,421      | 624          | 7,697       | 1       |
| 860001    | OFFICE SUPPLIES        | 99          | 177        | 78           | 959         |         |
| 865001    | POSTAGE, FREIGHT, ETC. | 1,506       | 2,685      | 1,179        | 14,537      | 2       |
| 890001    | REPRODUCTION           | 201         | 358        | 157          | 1,938       |         |
| 895001    | SALARIES & WAGES       | 3,358       | 5,985      | 2,628        | 32,408      | 5       |

Metadata Window | Field Window | Group Window

Metadata Window:  
 HIERARC11  
 MANUEANW1  
 MANUEANW2  
 MANUEANW3  
 HIERARC12  
 HIERARCHY

Field Window:  
 Level 1  
 REPORT\_DATE  
 OFFICE\_CODE  
 OFFICETOTAL  
 ACTYTD  
 Number, max length 15  
 starts in column 98  
 is after OFFICETOTAL, on the same row

Group Window:  
 ActYTD  
 REPORT\_DATE  
 ACTYTD

01/16/84

Section: MANUEANWK Pg 1 of 2 Policy: UG\_sample

Figure 6-15. Visual Parser Window with Expanded Levels, Fields, and Groups, and Extracted Data in Sample Window

5. To edit a field, double-click it in the Field Window. The General panel is displayed as shown in Figure 6-16.

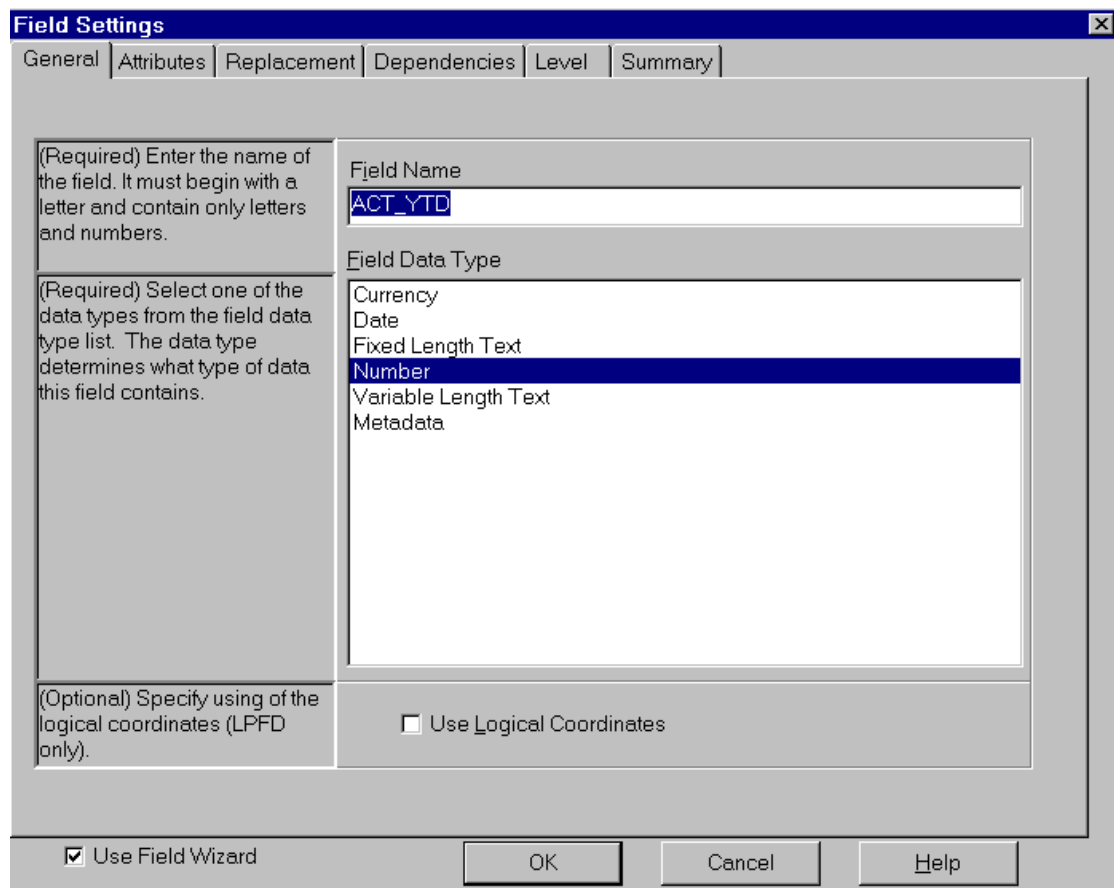


Figure 6-16. General Panel

- a. To display the panel that contains the options you want to change, click the appropriate tab, and make your changes.
  - b. Click **OK** when you are finished making changes to the field.
6. To add a field to the policy, follow the instructions in step 3 of "Creating a Policy and Extracting Data."
  7. If you need to add or delete levels, or move fields to different levels, in the Field Window, click the level or field to select it. With the cursor still on the level or field, right-click and select the appropriate Field Window context menu item. See "Field Window Context Menu" for a detailed explanation of the Field Window context menu.
  8. The following steps describe how to add a group to a policy, and to add fields to the group. Each group contains a discrete subset of data to be extracted. Policies can contain multiple groups, each of which extracts a different subset of data from the report. The sequence of the fields in the group determines the sequence of fields in the extracted data. See "Group Window" for a detailed explanation of groups and instructions on using the window.

- a. Click the **Add Group** button on the Policy toolbar. The Group Settings dialog is displayed as shown in Figure 6-17. It allows you to name the group and place fields in the group. See "Group Settings Dialog" for a detailed explanation of this dialog.

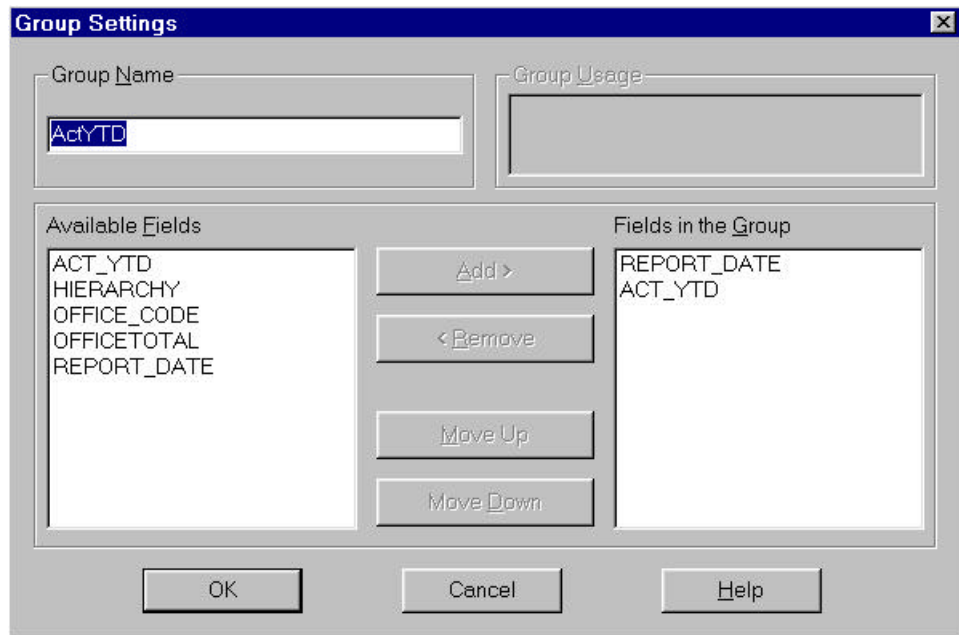


Figure 6-17. Group Settings Dialog

- b. Enter or select the appropriate options, then click **OK**. The new group appears in the Group Window. As soon as you create a group, the Sample Window displays the data extracted by that group, as shown in Figure 6-18.

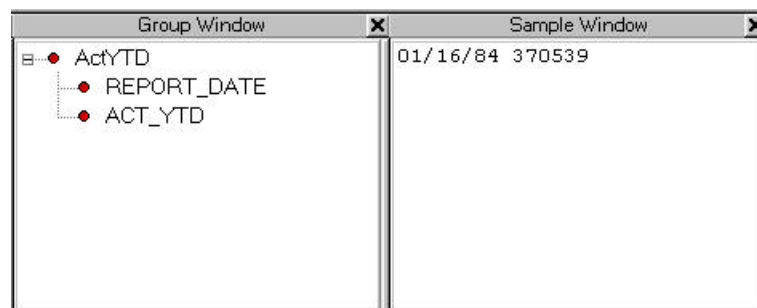


Figure 6-18. New Group Appears in Group Window;  
Extracted Data Appears in Sample Window

- c. Repeat steps a and b to add additional groups.
9. If you need to reorder the sequence of the fields within a group and change the sequence of the fields in the extracted data, in the Group Window, click the field you want to move. With the cursor still on the field, right-click and select the appropriate Group Window context menu item.
10. If you need to remove a field from a group, in the Group Window, click the field to

select it, then press the DEL key to remove it.

11. When you complete your changes, select **Policy|Save** or **Policy|Save As** from the DocumentDirect menu bar and save the policy to a file.
12. Do one of the following:

| To...                                                                                          | Do This...                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Export the data displayed in the Sample Window to a CSV, SYLK, or XML file                     | <ol style="list-style-type: none"> <li>1. Select the DocumentDirect <b>File Export</b> menu item.</li> <li>2. Use the Export to File dialog to export the extracted data. See Chapter 7 for more information.</li> </ol>                                                                                                          |
| Export the data displayed in the Sample Window using DDE links                                 | See Chapter 7 for information.                                                                                                                                                                                                                                                                                                    |
| Close the Visual Parser window and exit from the Visual Parser                                 | Select the DocumentDirect <b>Policy Edit/Create</b> menu item.                                                                                                                                                                                                                                                                    |
| Create a new policy                                                                            | <ol style="list-style-type: none"> <li>1. Select the DocumentDirect <b>Policy Edit/Create</b> menu item to close the Visual Parser window.</li> <li>2. Select the DocumentDirect <b>Policy Unload</b> menu item to unload the current policy.</li> <li>3. Follow the steps in "Creating a Policy and Extracting Data."</li> </ol> |
| Edit a different policy                                                                        | <ol style="list-style-type: none"> <li>1. Select the DocumentDirect <b>Policy Edit/Create</b> menu item to close the Visual Parser window</li> <li>2. Follow the steps in "Editing a Policy."</li> </ol>                                                                                                                          |
| Write a script that automatically opens a report, loads the policy, and exports extracted data | See Chapter 5 for information.                                                                                                                                                                                                                                                                                                    |

## Visual Parser Reference

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DocumentDirect's Visual Parser allows you to create, edit, and save policies, and extract data from pages in LPFD and character reports.

This section provides explanations of the Visual Parser windows, dialogs, and context menus used when working with policies.

## Visual Parser Window

The Visual Parser window provides the context within which you create new policies and change existing policies. A sample Visual Parser window, with a loaded policy, is shown in Figure 6-19.

| Code          | Description              | Value 1 | Value 2 | Value 3 | Value 4 | Value 5 |
|---------------|--------------------------|---------|---------|---------|---------|---------|
| 865001        | POSTAGE, FREIGHT, ETC.   | 1,506   | 2,685   | 1,179   | 14,537  | 26      |
| 890001        | REPRODUCTION             | 201     | 358     | 157     | 1,938   | 3       |
| 895001        | SALARIES & WAGES         | 3,358   | 5,985   | 2,628   | 32,408  | 58      |
| 905001        | SUBCONTRACTORS           | 1,045   | 1,862   | 818     | 10,083  | 18      |
| 935001        | TELEPHONE & TELEGRAPH    | 996     | 1,775   | 779     | 9,610   | 17      |
| 950001        | RAW MATERIALS            | 3,312   | 5,903   | 2,592   | 31,964  | 57      |
| 960001        | DEPRECIATION             | 1,247   | 2,223   | 976     | 12,035  | 21      |
| 970001        | MACHINE TOOL CONSUMABLES | 917     | 1,635   | 718     | 8,851   | 16      |
| 980001        | RENT                     | 1,055   | 1,881   | 826     | 10,188  | 18      |
| OFFICE TOTAL: |                          | 31,388  | 37,791  | 16,591  | 331,636 | 370     |

Metadata Window
 

- HIERARC11
- HIERARC12
- HIERARCHY
  - MANUEANWK

Field Window
 

- Level 1
  - REPORT\_DATE
  - OFFICE\_CODE
  - OFFICETOTAL
  - ACTYTD
    - Number, max length 15
    - starts in column 98
    - is after OFFICETOTAL, on the same row
  - HIERARCHY

Group Window
 

- ActYTD
  - HIERARCHY
  - REPORT\_DATE
  - ACTYTD

Figure 6-19. Visual Parser Window with a Loaded Policy

When an LPFD or character report is open in DocumentDirect, and you want to create a new policy, you can open the Visual Parser window from:

- the DocumentDirect menu bar: Select **Policy|Edit/Create**
- the DocumentDirect toolbar: Click the **Edit/Create Policy** button

When an LPFD or character report is open in DocumentDirect, and you want to work with an existing policy in order to change it or use it, you must first load the policy, then open the Visual Parser window. You can load an existing policy from:

- the DocumentDirect menu bar: Select **Policy|Load**
- the DocumentDirect toolbar: Click the **Load Policy** button

and then navigate to and open the appropriate policy file.

When an image report is open in DocumentDirect, the policy function is not available.

When you open the Visual Parser window, the contents of the displayed report may seem to change. This is because when the Visual Parser window is opened, only the portions of the report that can be interpreted as data are displayed. When displaying character reports, the report may not seem to change at all. When displaying LPFD reports, the display may change noticeably, depending on what percentage of the report is made up of images.

The top half of the Visual Parser window displays the open report. If you highlight the data or field label on the report that you want to add to the policy before adding the field, a number of the options in the Field Settings dialog are set automatically. If the report is an LPFD report, select the **Show Logical Fields** item on the Policy menu (**Policy|Show Logical Fields**) to clearly outline each logical field.

Once the fields making up the policy and the dependencies among them are defined, when you click a field that is dependent on another field, a visual representation of the dependency is displayed in the top half of the Visual Parser window.

The bottom half of the Visual Parser window displays the following windows:

- Metadata Window - displays the metadata keys and values associated with the report
- Field Window - displays the fields and levels that comprise the policy
- Group Window - displays the fields that make up the existing groups
- Sample Window - displays the data values and field labels extracted by the currently selected group

Items on the Policy menu on the DocumentDirect menu bar allow you to open and close each of these windows (**Policy|Metadata Window**, **Policy|Field Window**, **Policy|Group Window**, and **Policy|Sample Window**). You can also use the **Hide panel** item on each window's context menu to close the window. To see a window's context menu, right-click in the window. You can resize windows individually using the separator bar between windows. When a policy is loaded, its filename is displayed in the lower-right corner of the DocumentDirect status bar.

## Policy Toolbar









The Policy toolbar, shown in Figure 6-20, provides buttons for quickly creating and editing fields and groups, and for opening and closing windows. It also allows you to select a report file and change the report page displayed in the Visual Parser window.





Figure 6-20. Policy Toolbar

The toolbar buttons and fields are described in the table below.

| Button                                                                              | Name            | Description                                                  |
|-------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------|
|    | Edit Field      | Displays the Field Settings dialog for the highlighted field |
|    | Add Field       | Displays the Field Settings dialog for a new field           |
|    | Edit Group      | Displays the Group Settings dialog for the highlighted group |
|    | Add Group       | Displays the Group Settings dialog for a new group           |
|    | Metadata Window | Shows or hides the Metadata Window                           |
|    | Field Window    | Shows or hides the Field Window                              |
|  | Group Window    | Shows or hides the Group Window                              |
|  | Sample Window   | Shows or hides the Sample Window                             |

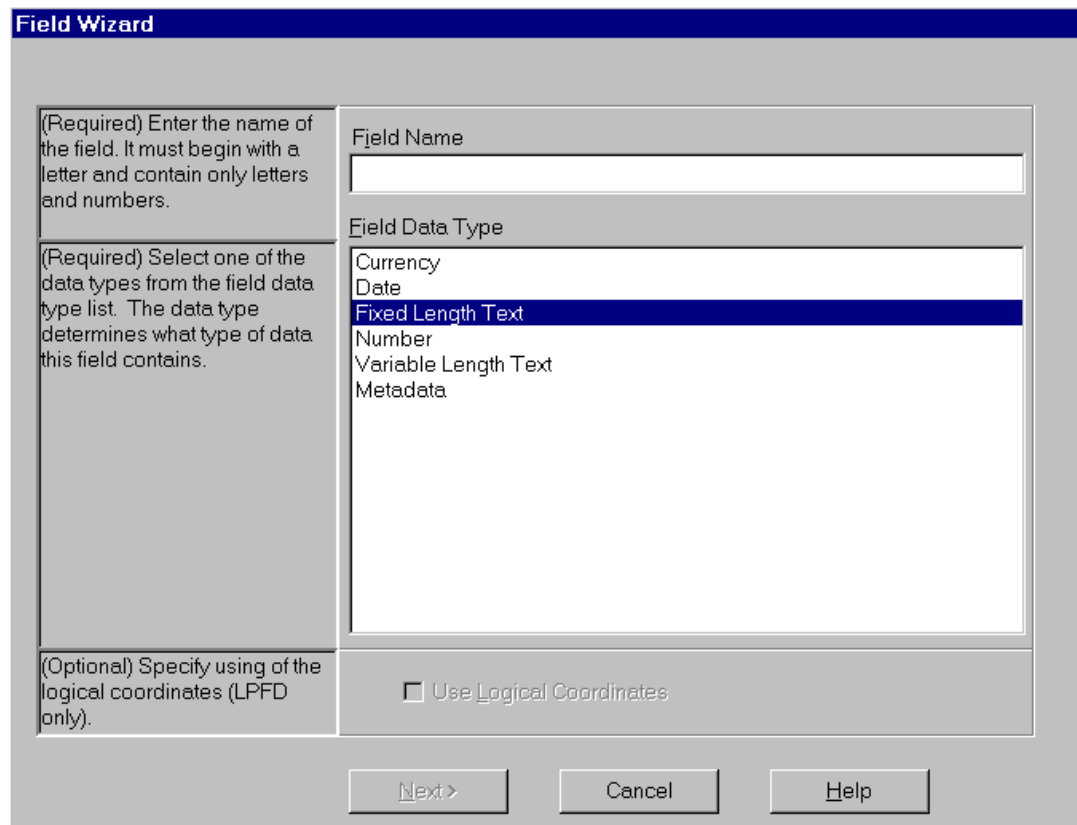
## Field Settings Dialog

The Field Settings dialog allows you to establish, change, or display the field definition and extract criteria for individual fields. Each tab or panel contains field definition or extract criteria options. When the Field Settings dialog appears, the General panel is always displayed.

The Field Settings dialog appears as either a wizard, as shown in Figure 6-21, or as a tabbed dialog, as shown in Figure 6-22. The contents of each panel are identical, regardless of the display style in use.

The **Field Settings Dialog Style** option on the Policy tab of the Preferences dialog (**Options|Preferences**) determines whether the Field Settings dialog is displayed as a tabbed dialog or as a wizard when creating a new policy or adding new fields to a policy. See "Policy Options" in Chapter C1, "Setting User Preferences" for more information. In addition, if the tabbed dialog style is active, every panel displays the **Use Field Wizard** checkbox. Check this option to use the wizard style when creating a new field.

When the wizard style is active, it is used when you add new fields to the policy and the classic tabbed style is used when editing fields. When the classic style is active, it is used both when adding new fields and when editing existing fields.



The image shows a 'Field Wizard' dialog box with a blue title bar. It is divided into three main sections on the left and two on the right. The top-left section contains the text: '(Required) Enter the name of the field. It must begin with a letter and contain only letters and numbers.' The middle-left section contains: '(Required) Select one of the data types from the field data type list. The data type determines what type of data this field contains.' The bottom-left section contains: '(Optional) Specify using of the logical coordinates (LPFD only).' The top-right section is labeled 'Field Name' and has an empty text input field. The middle-right section is labeled 'Field Data Type' and contains a list box with the following items: 'Currency', 'Date', 'Fixed Length Text' (which is highlighted with a blue background), 'Number', 'Variable Length Text', and 'Metadata'. The bottom-right section contains a checkbox labeled 'Use Logical Coordinates' which is currently unchecked. At the bottom of the dialog are three buttons: 'Next >', 'Cancel', and 'Help'.

Figure 6-21. Field Settings Dialog - Wizard

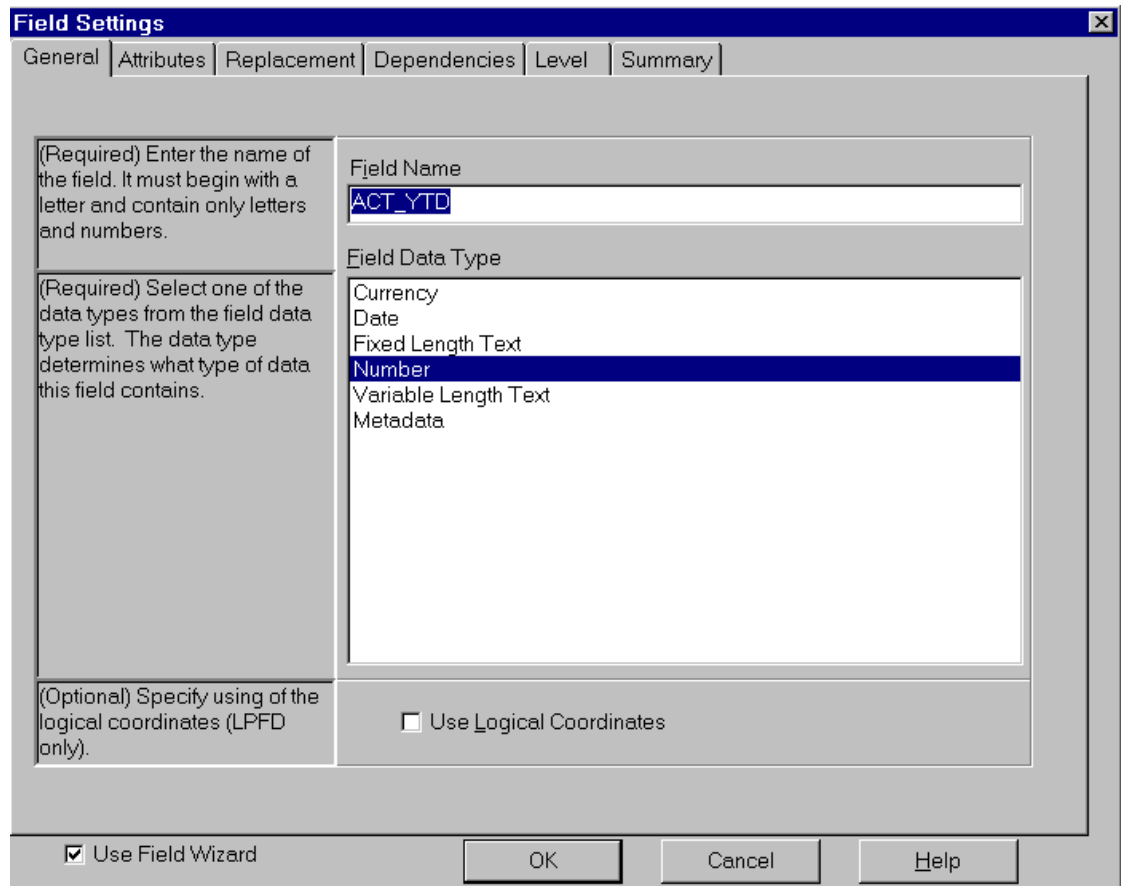


Figure 6-22. Field Settings Dialog - Classic Tabbed Dialog

### Navigating the Field Settings Dialog

When the wizard style is active:

- Click **Next** to bring up the next panel. When the current panel is the Summary panel, click **Finish** to save the field definition information and close the wizard. Or, press the **Enter** key to bring up the next panel. When the current panel is the Summary panel, the field definition information is saved and the wizard closes.
- Click **Cancel** or press the **Escape** key to close the wizard without saving field definition information.

When the classic tabbed dialog style is active:

- Click the tab to display the panel.
- Click **OK** or press the **Enter** key to save field definition information and close the dialog.

- Click **Cancel** or press the **Escape** key to close the dialog without saving field definition information.

### General Panel

The General panel displays the name of the field and the type of data that is expected in that field. This panel also allows you to indicate that, for LPFD reports, logical coordinates are used to determine the position of the field on the report. The General panel is shown in Figure 6-23.

The screenshot shows the 'Field Wizard' dialog box with the 'General Panel' selected. The dialog has a title bar 'Field Wizard' and a grey background. On the left, there are three instructional text boxes: 1. '(Required) Enter the name of the field. It must begin with a letter and contain only letters and numbers.' 2. '(Required) Select one of the data types from the field data type list. The data type determines what type of data this field contains.' 3. '(Optional) Specify using of the logical coordinates (LPFD only).' On the right, there are two main sections: 'Field Name' with a text input field containing 'REPORT\_DATE', and 'Field Data Type' with a list box containing 'Currency', 'Date' (highlighted), 'Fixed Length Text', 'Number', 'Variable Length Text', and 'Metadata'. Below these is a checkbox labeled 'Use Logical Coordinates' which is currently unchecked. At the bottom, there are three buttons: 'Next >', 'Cancel', and 'Help'.

Figure 6-23. General Panel

| Field                   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Field Name              | Assign a name to the field. The field name must begin with a letter, must contain only letters and numbers, and must be a maximum of 32 characters. This is a required field.                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Field Data Type         | <p>Select the Field Data Type that identifies the type of data that this field should contain. If the data that actually appears on the report does not match the characteristics of the selected data type, the data is ignored by the extraction process. This is a required field.</p> <p>Note that the Attributes panel allows you to further define the characteristics of the field, and that the options appearing on the Attributes panel vary depending on the Field Data Type you select. See the <b>Characteristics of Field Data Types</b> table below for a description of the general characteristics of each type.</p> |
| Use Logical Coordinates | <p>Specify whether to use LPFD logical coordinates to define the position of the field on the LPFD report page. This option is enabled when the report page is in one of the LPFD formats: AFP, DJDE/Metacode, PCL, PDF, or PostScript, and when you select a <b>Field Data Type</b> other than <b>Fixed Length Text</b> or <b>Metadata</b>.</p> <p>When you select this option, the Dependencies panel displays the field's position as a <b>Fixed Index</b> rather than a <b>Fixed Column</b>.</p>                                                                                                                                  |

### Characteristics of Field Data Types

The following table lists the **Field Data Types** and a description of each data type.

| Field Type           | Field Expected to Contain...                                                                                                                                                                           |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Currency             | Monetary amounts. Currency fields can contain a leading dollar sign (\$), commas, and a decimal point, and a trailing debit or credit symbol such as (CR).                                             |
| Date                 | A date in one of the date formats recognized by DocumentDirect, for example, MM/DD/YYYY or YYMMDD.                                                                                                     |
| Fixed Length Text    | A fixed number of alphanumeric and printable characters.                                                                                                                                               |
| Number               | Numeric data. Number fields can contain commas and decimal points.                                                                                                                                     |
| Variable Length Text | A character string that can vary in length. The character that is recognized as the end-of-string character is user-defined. All characters preceding the first end-of-string character are extracted. |
| Metadata             | A non-positional metadata string that is associated with the report page but is not displayed on the page. This option is disabled when metadata is not associated with the current report page.       |

*Currency Attributes Panel*

If, on the General panel, you selected **Currency** as the **Field Data Type**, the Currency Attributes panel is displayed as shown in Figure 6-24.

**Field Wizard**

(Optional) Select if the field can contain all spaces.

☐ Allow Blank Fields

(Optional) Enter the maximum and/or minimum number of characters in the field.

☐ Minimum length: 1

☐ Maximum length: 1

(Optional) Enter the maximum and/or minimum value of the field.

☐ Minimum value: 0

☐ Maximum value: 0

< Back   Next >   Cancel   Help

*Figure 6-24. Currency Attributes Panel*

| Option             | Select this Option to...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Allow Blank Fields | Select this option to allow a field to be added to the policy when its contents are blank, and to extract blanks when the field on the report is completely blank. When both <b>Minimum length</b> and <b>Maximum length</b> are provided, <b>Maximum length</b> determines the number of blanks extracted. When either <b>Minimum length</b> or <b>Maximum length</b> is provided, whichever is provided determines the number of blanks extracted.                                                           |
| Minimum length     | <p>Extract data depending on its length. If the actual data found on the report page contains fewer characters than the minimum length, the data is ignored. This field is optional.</p> <p>If you select the <b>Minimum length</b> option, you must also enter the minimum number of characters that this field must contain. The number of characters used for the dollar sign, comma(s), decimal point, and credit and debit indicators must be included in this length.</p>                                |
| Maximum length     | <p>Extract data depending on its length. If the actual data found on the report page contains more characters than the maximum, the characters in excess of the maximum length are ignored. This field is optional.</p> <p>If you select the <b>Maximum length</b> option, you must also enter the maximum number of characters that this field must contain. The number of characters used for the dollar sign, comma(s), decimal point, and credit and debit indicators must be included in this length.</p> |
| Minimum value      | <p>Extract data depending on its numeric value. If the actual data found on the report page contains a numeric value less than the minimum value, the data is ignored. This field is optional.</p> <p>If you select the <b>Minimum value</b> option, you must also enter the minimum value for this field.</p>                                                                                                                                                                                                 |
| Maximum value      | <p>Extract data depending on its numeric value. If the actual data found on the report page contains a numeric value greater than the maximum value, the data is ignored. This field is optional.</p> <p>If you select the <b>Maximum value</b> option, you must also enter the maximum numeric value for this field.</p>                                                                                                                                                                                      |



*Date Attributes Panel*

If, on the General panel, you selected **Date** as the **Field Data Type**, the Date Attributes panel is displayed as shown in Figure 6-25.

**Field Wizard**

(Optional) Select if the field can contain all spaces.

☐ Allow Blank Fields

(Required) Select the specified date format.

Date Format  
MM/DD/YY

(Optional) The Match Date List can be used to include or exclude specific dates. Select the appropriate option for using the date list. If the field is to be constrained, enter the dates into the date list

☒ Don't use date list  
☐ Don't match any date in list  
☐ Match any date in list

MM DD YYYY Add ==> Match Date List  
10/09/99

Remove <==

(Optional) Enter the maximum and/or minimum date for the field.

☐ Minimum date: MM DD YYYY  
☐ Maximum date: MM DD YYYY

< Back Next > Cancel Help

*Figure 6-25. Date Attributes Panel*

| Option                       | Description                                                                                                                                                                                                                                                                                                 |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Allow Blank Fields           | Select this option to allow a field to be added to the policy when its contents are blank, and to extract blanks when the field on the report is completely blank. The <b>Date Format</b> determines the number of blanks extracted (e.g. MM/DD/YY is the selected format, eight blanks will be extracted). |
| Date Format                  | Select the format that matches the date format of the field on the report page. If the format of the actual data found on the report page does not match this format, the data is ignored. This is a required field.                                                                                        |
| Don't use date list          | Select this option to ignore the contents of the <b>Match Date List</b> when extracting data.                                                                                                                                                                                                               |
| Don't match any date in list | Select this option to extract the data only if the data found on the report page does not match any of the dates in the <b>Match Date List</b> .                                                                                                                                                            |
| Match any date in list       | Select this option to extract the data only if the data found on the report page matches a date found in the <b>Match Date List</b> .                                                                                                                                                                       |
| MM DD YYYY                   | Enter the date you want to add to the <b>Match Date List</b> , then click the <b>Add</b> button. This field is optional.                                                                                                                                                                                    |
| Minimum date                 | Select this option to extract the data only if the data found on the report page is later than or equal to the minimum date entered. This is an optional field; however, if you select this option, you must enter the <b>Minimum date</b> .                                                                |
| Maximum date                 | Select this option if you want to extract the data only if the data found on the report page is earlier than or equal to the maximum date entered. This is an optional field; however, if you select this option, you must enter the <b>Maximum date</b> .                                                  |

## Changing the Match Date List

The following table describes how to add dates to and remove dates from the **Match Date List**:

| To...                                        | Do This...                                                                                                                                                                                                                            |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Add dates to the <b>Match Date List</b>      | <ol style="list-style-type: none"><li>1. Select the <b>Match any date in list</b> radio button. The date entry fields are enabled.</li><li>2. Enter the date you want to add to the list, then click the <b>Add</b> button.</li></ol> |
| Remove dates from the <b>Match Date List</b> | Select the date you want to remove from the list, then click the <b>Remove</b> button.                                                                                                                                                |

*Fixed Length Text Attributes Panel*

If, on the General panel, you selected **Fixed Length Text** as the **Field Data Type**, the Fixed Length Text Attributes panel is displayed as shown in Figure 6-26.

**Field Wizard**

(Optional) Select if the field can contain all spaces.

☐ Allow Blank Fields

(Required) Enter the number of characters per row and the number of rows for this field.

String Length: 1

Number of Rows: 1

(Optional) The Match String List can be used to include or exclude specific strings. Select the appropriate option for using the string list. If the field is to be constrained, enter the strings into the string list.

☒ Don't use match list

☐ Match any string in list

☐ Don't match any string in list

New string match

Figure 6-26. Fixed Length Text Attributes Panel

| Option                         | Description                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Allow Blank Fields             | Select this option to allow a field to be added to the policy when its contents are blank, and to extract blanks when the field on the report is completely blank. The <b>String Length</b> determines the number of blanks extracted.                                                                                                        |
| String Length                  | Enter the length of the field, including blanks. The contents of this field and the <b>Number of Rows</b> field are used in conjunction with the <b>Use Fixed Column</b> , <b>Use Fixed Index</b> , and <b>Use Fixed Row</b> fields on the Dependencies panel to identify the number of characters to be extracted. This is a required field. |
| Number of Rows                 | Enter the number of rows in the field, including rows that may be empty. This is a required field.                                                                                                                                                                                                                                            |
| Don't use match list           | Select this option to ignore the contents of the match list when extracting data.                                                                                                                                                                                                                                                             |
| Match any string in list       | Select this option to extract the data only if the data found on the report page matches a character string found in the match list.                                                                                                                                                                                                          |
| Don't match any string in list | Select this option if you want to extract the data only if the data found on the report page does not match all of the character strings found in the match list.                                                                                                                                                                             |
| New string match               | Enter the character string you want to add to the match list, then click the <b>Add</b> button. This field is optional.                                                                                                                                                                                                                       |

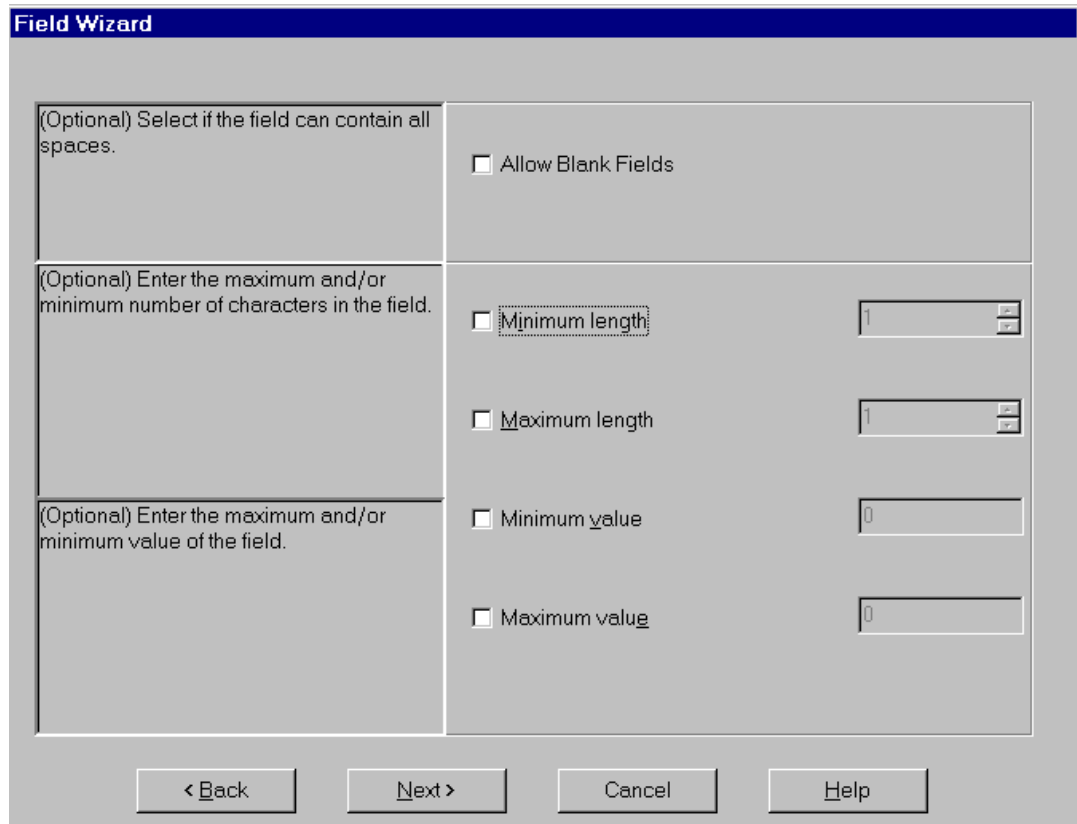
### Changing the Fixed Length Text Match List

The following table describes how to add character strings to and remove character strings from the match list:

| To...                                        | Do This...                                                                                                                                                                                                                                                              |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Add character strings to the match list      | <ol style="list-style-type: none"> <li>1. Select the <b>Match any string in list</b> radio button. The <b>New string match</b> entry field is enabled.</li> <li>2. Enter the character string you want to add to the list, then click the <b>Add</b> button.</li> </ol> |
| Remove character strings from the match list | Select the character string you want to remove from the list, then click the <b>Remove</b> button.                                                                                                                                                                      |

*Number Attributes Panel*

If, on the General panel, you selected **Number** as the **Field Data Type**, the Number Attributes panel is displayed as shown in Figure 6-27.



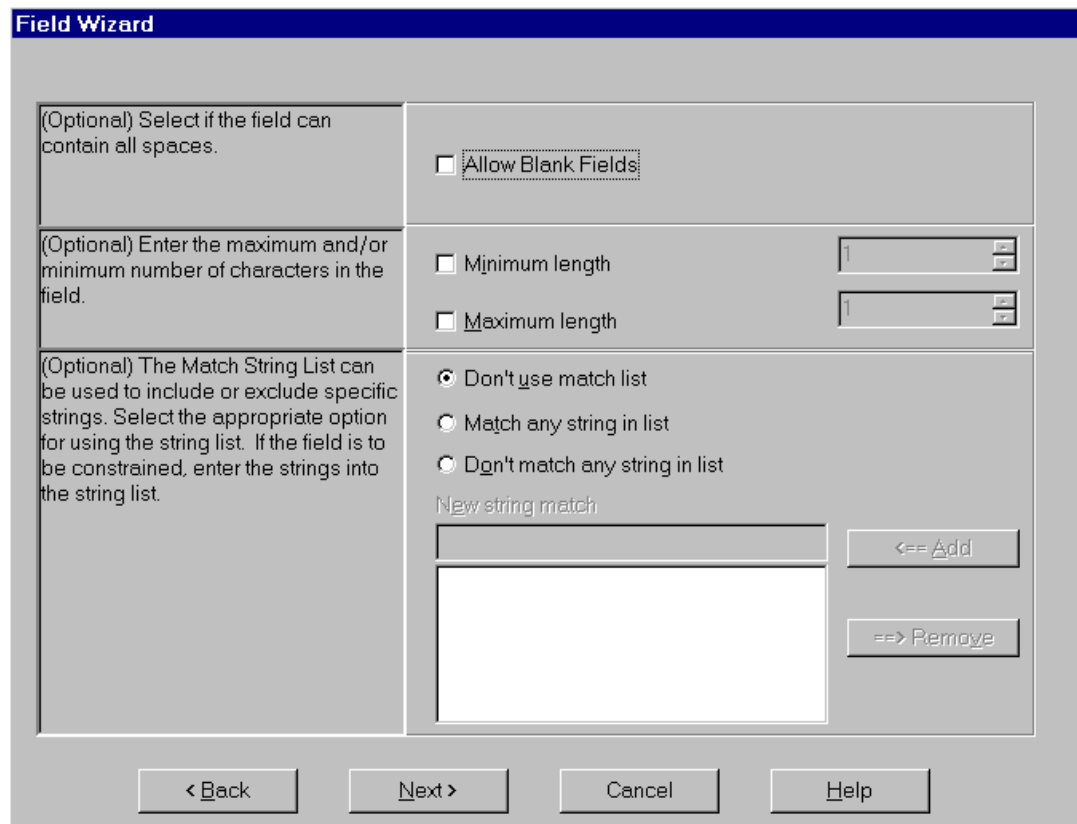
The image shows a software window titled "Field Wizard" with a blue header bar. The window is divided into two main sections. The left section contains three text boxes with optional instructions: "(Optional) Select if the field can contain all spaces.", "(Optional) Enter the maximum and/or minimum number of characters in the field.", and "(Optional) Enter the maximum and/or minimum value of the field." The right section contains four checkboxes with corresponding input fields: "Allow Blank Fields" (unchecked), "Minimum length" (unchecked, with a text box containing "1"), "Maximum length" (unchecked, with a text box containing "1"), "Minimum value" (unchecked, with a text box containing "0"), and "Maximum value" (unchecked, with a text box containing "0"). At the bottom of the window are four buttons: "< Back", "Next >", "Cancel", and "Help".

Figure 6-27. Number Attributes Panel

| Option             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Allow Blank Fields | Select this option to allow a field to be added to the policy when its contents are blank, and to extract blanks when the field on the report is completely blank. When both <b>Minimum length</b> and <b>Maximum length</b> are provided, <b>Maximum length</b> determines the number of blanks extracted. When either <b>Minimum length</b> or <b>Maximum length</b> is provided, whichever is provided determines the number of blanks extracted.              |
| Minimum length     | <p>Extract data depending on its length. If the actual data found on the report page contains fewer characters than the minimum length, the data is ignored. This field is optional.</p> <p>If you select the <b>Minimum length</b> option, you must also enter the minimum number of characters that this field must contain. The number of characters used for comma(s) and decimal point should be included in this length.</p>                                |
| Maximum length     | <p>Extract data depending on its length. If the actual data found on the report page contains more characters than the maximum, the characters in excess of the maximum length are ignored. This field is optional.</p> <p>If you select the <b>Maximum length</b> option, you must also enter the maximum number of characters that this field must contain. The number of characters used for comma(s) and decimal point should be included in this length.</p> |
| Minimum value      | <p>Extract data depending on its numeric value. If the actual data found on the report page contains a numeric value less than the minimum value, the data is ignored. This field is optional.</p> <p>If you select the <b>Minimum value</b> option, you must also enter the minimum value for this field.</p>                                                                                                                                                    |
| Maximum value      | <p>Extract data depending on its numeric value. If the actual data found on the report page contains a numeric value greater than the maximum value, the data is ignored. This field is optional.</p> <p>If you select the <b>Maximum value</b> option, you must also enter the maximum numeric value for this field.</p>                                                                                                                                         |

*Variable Length Text Attributes Panel*

If, on the General panel, you selected **Variable Length Text** as the **Field Data Type**, the Variable Length Text Attributes panel is displayed as shown in Figure 6-28.



The image shows a software window titled "Field Wizard" with a blue header bar. The main area is divided into two columns. The left column contains three instructional text boxes: "(Optional) Select if the field can contain all spaces.", "(Optional) Enter the maximum and/or minimum number of characters in the field.", and "(Optional) The Match String List can be used to include or exclude specific strings. Select the appropriate option for using the string list. If the field is to be constrained, enter the strings into the string list." The right column contains a series of controls: a checkbox labeled "Allow Blank Fields" (unchecked), two checkboxes for "Minimum length" and "Maximum length" (both unchecked) each followed by a numeric input field containing "1", and three radio buttons for matching a string list: "Don't use match list" (selected), "Match any string in list", and "Don't match any string in list". Below these is a section labeled "New string match" with a text input field, a list box, and two buttons: "<== Add" and "==> Remove". At the bottom of the window are four buttons: "< Back", "Next >", "Cancel", and "Help".

*Figure 6-28. Variable Length Text Attributes Panel*

| Option                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Allow Blank Fields             | Select this option to allow a field to be added to the policy when its contents are blank, and to extract blanks when the field on the report is completely blank. When both <b>Minimum length</b> and <b>Maximum length</b> are provided, <b>Maximum length</b> determines the number of blanks extracted. When either <b>Minimum length</b> or <b>Maximum length</b> is provided, whichever is provided determines the number of blanks extracted.                                    |
| Minimum length                 | <p>Select this option to extract data depending on its length. If the actual data found on the report page contains fewer characters than the minimum length, the data is ignored. This field is optional.</p> <p>If you select the <b>Minimum length</b> option, you must also enter the minimum number of characters that this field must contain. The number of characters used for comma(s) and decimal point should be included in this length.</p>                                |
| Maximum length                 | <p>Select this option to extract data depending on its length. If the actual data found on the report page contains more characters than the maximum, the characters in excess of the maximum length are ignored. This field is optional.</p> <p>If you select the <b>Maximum length</b> option, you must also enter the maximum number of characters that this field must contain. The number of characters used for comma(s) and decimal point should be included in this length.</p> |
| Don't use match list           | Select this option to ignore the contents of the match list when extracting data.                                                                                                                                                                                                                                                                                                                                                                                                       |
| Match any string in list       | Select this option to extract the data only if the data found on the report page matches a character string found in the match list.                                                                                                                                                                                                                                                                                                                                                    |
| Don't match any string in list | Select this option to extract the data only if the data found on the report page does not match any of the character strings found in the match list.                                                                                                                                                                                                                                                                                                                                   |
| New string match               | Enter the character string you want to add to the match list, then click the <b>Add</b> button. This field is optional.                                                                                                                                                                                                                                                                                                                                                                 |



### Changing the Variable Length Text Match List

The following table describes how to add character strings to and remove character strings from the match list:

| To...                                        | Do This...                                                                                                                                                                                                                                                           |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Add character strings to the match list      | <ol style="list-style-type: none"><li>1. Select the <b>Match any string in list</b> radio button. The <b>New string match</b> entry field is enabled.</li><li>2. Enter the character string you want to add to the list, then click the <b>Add</b> button.</li></ol> |
| Remove character strings from the match list | Select the character string you want to remove from the list, then click the <b>Remove</b> button.                                                                                                                                                                   |

### Metadata Attributes Panel

If, on the General panel, you selected **Metadata** as the **Field Data Type**, the Metadata Attributes panel is displayed as shown in Figure 6-29.

**Field Wizard**

(Required) Enter a metadata key associated with the field.

Metadata key: **HIERARC11**

(Optional) Enter the maximum and/or minimum number of characters in the field.

☐ Minimum length:

☐ Maximum length:

(Optional) The Match String List can be used to include or exclude specific strings. Select the appropriate option for using the string list. If the field is to be constrained, enter the strings into the string list.

☒ Don't use match list

☐ Match any string in list

☐ Don't match any string in list

New string match

Figure 6-29. Metadata Attributes Panel

| Option                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Metadata key                   | Enter the name of the metadata key with which the field is associated. If you used the <b>Create Field</b> item on the Metadata Window context menu to add this field definition, the Metadata key field is pre-filled with the metadata key name or, if the metadata key name is not unique, with a field name in the format: FieldN. If you enter the name of a metadata key that is not associated with the report page, no data matches the selection criteria, and nothing is extracted. |
| Minimum length                 | Select this option to extract metadata depending on its length. If the metadata field contains fewer characters than the minimum length, the metadata is ignored. This field is optional.<br><br>If you select the <b>Minimum length</b> option, you must also enter the minimum number of characters that this metadata field must contain.                                                                                                                                                  |
| Maximum length                 | Select this option to extract metadata depending on its length. If the metadata field contains more characters than the maximum length, the characters in excess of the maximum length are ignored. This field is optional.<br><br>If you select the <b>Maximum length</b> option, you must also enter the maximum number of characters that this metadata field must contain.                                                                                                                |
| Don't use match list           | Select this option to ignore the match list when extracting metadata.                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Match any string in list       | Select this option to extract the metadata only if the metadata associated with the report page matches any metadata string found in the match list.                                                                                                                                                                                                                                                                                                                                          |
| Don't match any string in list | Select this option if you want to extract the metadata only if the metadata associated with the report page does not match any of the metadata strings found in the match list.                                                                                                                                                                                                                                                                                                               |
| New string match               | Enter the character string you want to add to the match list, then click the <b>Add</b> button. This field is optional.                                                                                                                                                                                                                                                                                                                                                                       |

### Changing the Metadata Attributes Match List

The following table describes how to add character strings to and remove character strings from the match list:

| To...                                        | Do This...                                                                                                                                                                                                                                                           |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Add character strings to the match list      | <ol style="list-style-type: none"><li>1. Select the <b>Match any string in list</b> radio button. The <b>New string match</b> entry field is enabled.</li><li>2. Enter the character string you want to add to the list, then click the <b>Add</b> button.</li></ol> |
| Remove character strings from the match list | Select the character string you want to remove from the list, then click the <b>Remove</b> button.                                                                                                                                                                   |

### *Replacement Panel*

The Replacement panel allows you to substitute different data for the actual data found in the field on the report. The Replacement panel is shown in Figure 6-30.

(Optional) Enter a replacement value if the field is to contain a fixed value regardless of the report data found at that location.

☐ Use Replacement Value

< Back    Next >    Cancel    Help

*Figure 6-30. Replacement Panel*

| Field                 | Description                                                                                                                                                                      |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use Replacement Value | Substitute different data for the actual data found on the report page. Enter the replacement data. The actual data found on the report page is ignored. This field is optional. |

### *Dependencies Panel*

The Dependencies panel displays column or index position information, row position information, and information about the field's position in relation to other fields. This panel is not available when **Metadata** is selected as the **Field Data Type** on the General panel, since metadata is not displayed on a report and does not have positional characteristics.

There are two versions of the Dependencies panel: one version for character reports and, if the **Use Logical Coordinates** option is selected, a slightly different version for LPFD reports.

The Dependencies panel for character reports is shown in Figure 6-31.

The screenshot shows the 'Field Wizard' dialog box, specifically the 'Dependencies' panel for character reports. The panel is divided into two main sections. The top section contains three checkboxes: 'Use Fixed Column' (checked), 'Use Fixed Row' (checked), and 'The Field Only Occurs Once Per Page' (unchecked). To the right of these checkboxes are labels 'Column' and 'Row' with corresponding numeric input fields, both set to '1'. The bottom section contains a table with two columns: 'Field' and 'Dependency'. Below the table are 'Add' and 'Remove' buttons. At the bottom of the dialog are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

(Optional) If the field is found in a specific position, check the appropriate box and set the column and/or row position. Check the 'Once Per Page' box to indicate that the field occurs only once per page.

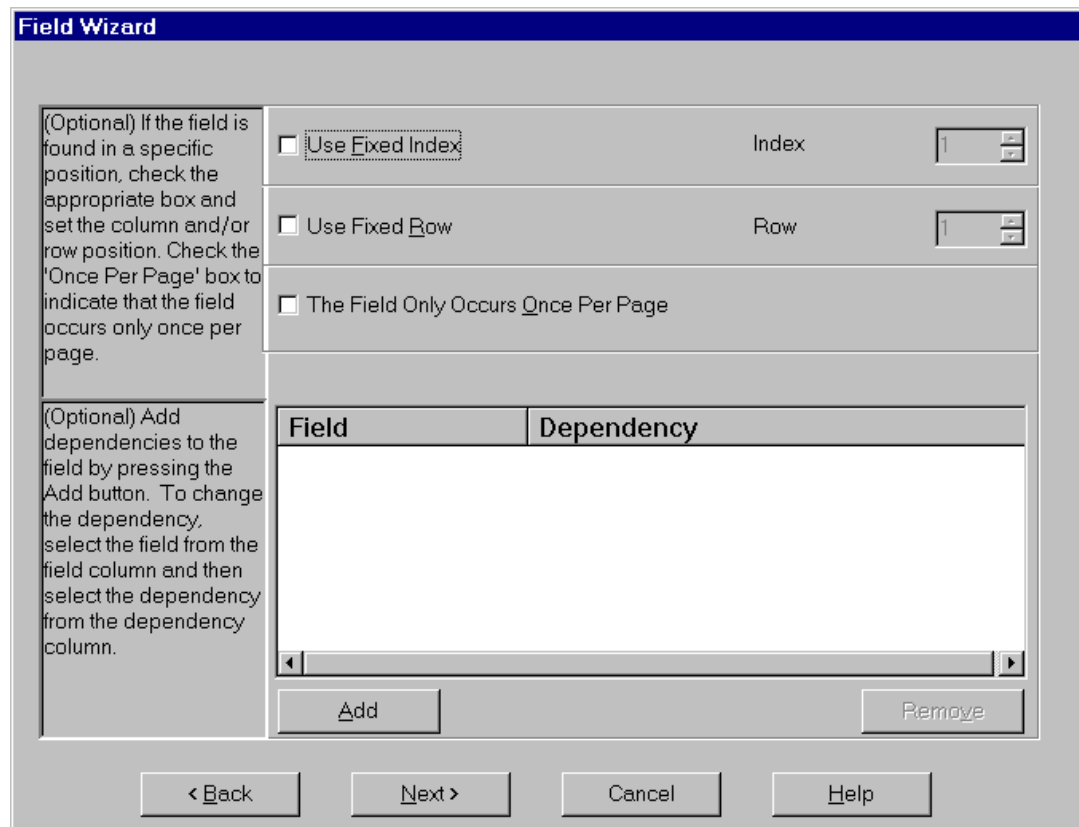
(Optional) Add dependencies to the field by pressing the Add button. To change the dependency, select the field from the field column and then select the dependency from the dependency column.

| Field | Dependency |
|-------|------------|
|-------|------------|

Buttons: Add, Remove, < Back, Next >, Cancel, Help

Figure 6-31. Dependencies Panel for Character Reports

The Dependencies panel for LPFD reports, when the **Use Logical Coordinates** option is selected, is displayed as shown in Figure 6-32.



The image shows a 'Field Wizard' dialog box with a 'Dependencies' panel. The panel contains three checkboxes: 'Use Fixed Index', 'Use Fixed Row', and 'The Field Only Occurs Once Per Page'. Below these is a table with two columns: 'Field' and 'Dependency'. The table is currently empty. Below the table are 'Add' and 'Remove' buttons. At the bottom of the dialog are '< Back', 'Next >', 'Cancel', and 'Help' buttons.

(Optional) If the field is found in a specific position, check the appropriate box and set the column and/or row position. Check the 'Once Per Page' box to indicate that the field occurs only once per page.

(Optional) Add dependencies to the field by pressing the Add button. To change the dependency, select the field from the field column and then select the dependency from the dependency column.

| Field | Dependency |
|-------|------------|
|-------|------------|

Buttons: < Back, Next >, Cancel, Help

Figure 6-32. Dependencies Panel

| Field                               | Description                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use Fixed Column                    | Select this option if the field always starts in the same column and you want to use its starting column to define its position on the character report. This field is optional.                                                                                                                                                                                                                                                   |
| Column                              | Enter the number of the column in which the field starts. This field is pre-filled if you select the field on the report in the Visual Parser window before adding field definition information. If the <b>Use Fixed Column</b> option is selected, this field is required.                                                                                                                                                        |
| Use Fixed Index                     | This option appears instead of the <b>Use Fixed Column</b> option when the <b>Use Logical Coordinates</b> option is selected on the General panel.<br><br>Select this option if the fixed index for the field is always the same and you want to use its index to define its position in the LPFD report. A Fixed Index is a sequential number assigned to each logical field contained in an LPFD report. This field is optional. |
| Index                               | This option appears instead of <b>Column</b> when the <b>Use Logical Coordinates</b> option is selected on the General panel.<br><br>Enter the index number related to the logical field to be extracted. This field is pre-filled if you select the field on the report in the Visual Parser window before adding field definition information. If the <b>Use Fixed Index</b> option is selected, this field is required.         |
| Use Fixed Row                       | Select this option if the field always appears in the same row and you want to use the row to define its position on the report. This field is optional.                                                                                                                                                                                                                                                                           |
| Row                                 | Enter the number of the row in which the field appears. This field is pre-filled if you select the field on the report in the Visual Parser window before adding field definition information. If the <b>Use Fixed Row</b> option is selected, this field is required.                                                                                                                                                             |
| The Field Only Occurs Once Per Page | Select this option if the field only occurs once per page. If this option is selected and the field occurs more than once per page, only the first possible instance is considered for extraction. This field is optional.                                                                                                                                                                                                         |
| Field                               | Displays fields with which a dependency exists. See the table below for instructions on adding, changing, and deleting dependencies. This field is optional.                                                                                                                                                                                                                                                                       |
| Dependency                          | If a field name is entered, a <b>Dependency</b> must be selected.                                                                                                                                                                                                                                                                                                                                                                  |

| Field | Description |
|-------|-------------|
|-------|-------------|

### Adding and Removing Field Dependencies

The following table describes how to add and remove dependencies between fields:

| To...             | Do This...                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Add dependency    | <ol style="list-style-type: none"> <li>1. Click the <b>Add</b> button. Dashes appear in the list box under the <b>Field</b> and <b>Dependency</b> headings.</li> <li>2. Click the dash under the <b>Field</b> heading. Field name and dependency options appear.</li> <li>3. Click the <b>Field</b> name drop-down list and select the field name of the field with which you are establishing the dependency.</li> <li>4. Click the <b>Dependency</b> drop-down list and select the option that describes the dependency you want to establish.</li> </ol> |
| Remove dependency | <ol style="list-style-type: none"> <li>1. Select the dependency you wish to remove.</li> <li>2. Click the <b>Remove</b> button.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                  |

### Level Panel

Levels describe the relative hierarchical relationships among fields. In general, this means Level 2 fields repeat within Level 1 fields, and Level 3 fields repeat within Level 2 fields, and so on. For example, a Company (Level 1) can have divisions (Level 2) that each have offices (Level 3) tracking expenses by expense type (Level 4).

Levels also define when data is extracted depending on one-to-one and one-to-many relationships between fields in a group. Each occurrence of a field on a report is called an instance, and the scope of that instance continues until the next instance of that field or the end of the report page, whichever occurs first.

- When two fields are assigned the same level, both fields are extracted only when there is a one-to-one relationship between them. For example, if Field A and Field B are both assigned Level 2, and there are four instances of Field A and five instances of Field B, only the first four instances of data in Fields A and B are extracted. The fifth instance of Field B is ignored.

- When two fields are assigned different levels, data is extracted when there is a one-to-one or a one-to-many relationship between the field with the lower level number and the field with the higher level number. For example, if Field A is assigned Level 2, Field B is assigned Level 3, and there is one instance of Field A and four instances of Field B within the scope of the one instance of Field A, all instances of data in Fields A and B are extracted. As a second example, if there are six instances of Field A, and the scope of the fifth instance does not include any instances of Field B, the fifth instance of Field A is ignored.

The Level panel allows you to assign a level to the field you are adding or editing. The panel also displays the levels assigned to the other fields that are part of the policy. The Level panel is shown in Figure 6-33.

| Field | Level |
|-------|-------|
|-------|-------|

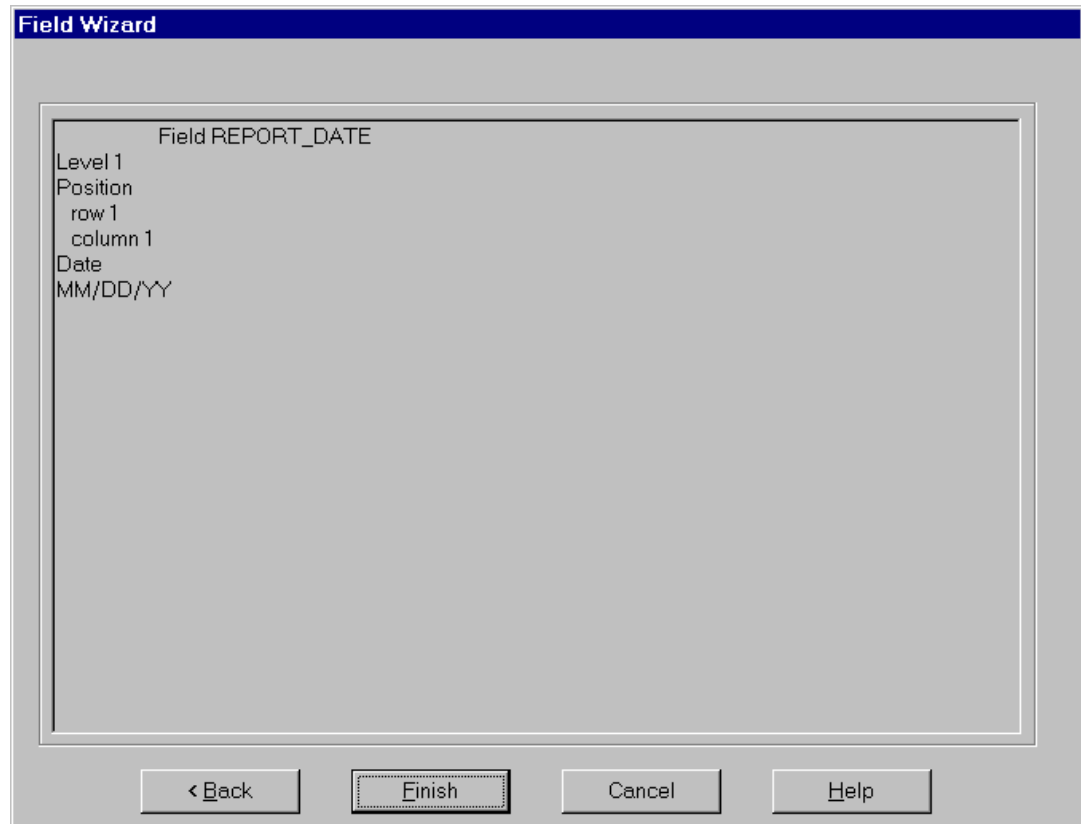
Figure 6-33. Level Panel

| Option       | Description                                                            |
|--------------|------------------------------------------------------------------------|
| Level Number | Select the level number to assign to the field.                        |
| Field        | Displays the names of other fields in the policy.                      |
| Level        | Displays the level numbers associated with other fields in the policy. |



*Summary Panel*

The Summary panel displays all of the position information and extract criteria settings established for the field. The Summary panel is shown in Figure 6-34.



*Figure 6-34. Summary Panel*

**Group Settings Dialog**

The Group Settings dialog, shown in Figure 6-35, allows you to establish, change, or display the settings for a group. The Group Settings dialog displays the name of the group, the list of fields available to be added to the group, and the fields currently contained in the group.

The following list describes the relationships among policies, groups, fields and extracted data:

- Each policy contains one or more groups.
- Each group contains one or more fields.
- The extract criteria defined in the Field Settings dialog for each field determines whether report content is extracted.
- The sequence of the fields in the group determines the structure of the extracted data.

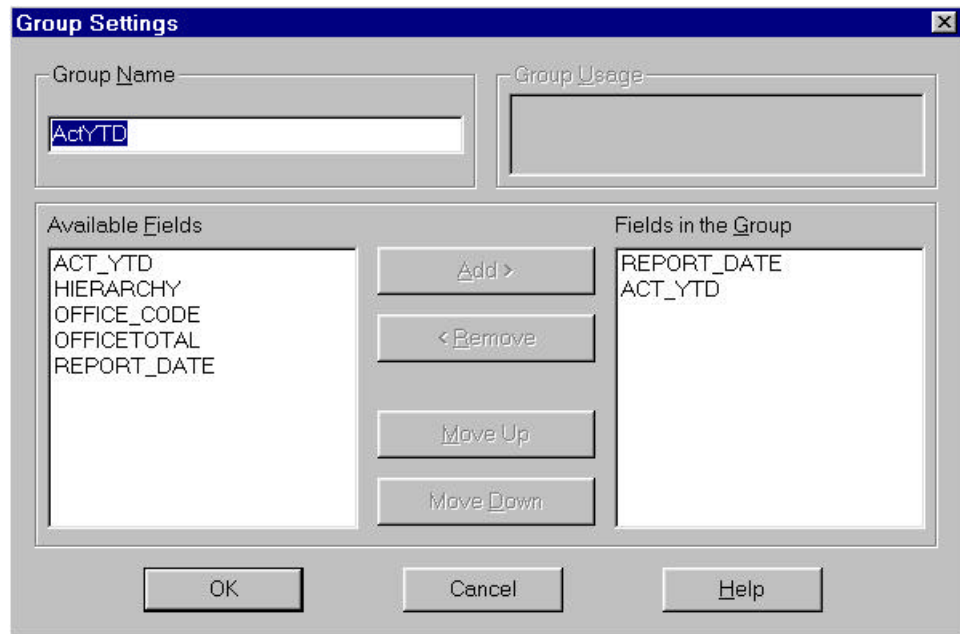


Figure 6-35. Group Settings Dialog

| Field               | Description                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Group Name          | Assign a name to the group. The group name must begin with a letter or underscore; must contain only letters, numbers, and underscores; and must be a maximum of 10 characters. Group names must be unique within a policy. This is a required field.                                                                                                                                                          |
| Group Usage         | This field is disabled.                                                                                                                                                                                                                                                                                                                                                                                        |
| Available Fields    | Displays the fields that are available to add to the group.<br><br>To add a field to the group, select it, then click the <b>Add</b> button. You can also add a single field by double-clicking it.<br><br>To add more than one field at a time, select the fields while holding down the CTRL or SHIFT keys.                                                                                                  |
| Fields in the Group | Displays the fields included in the group.<br><br>To remove a field from the group, select it, then click the <b>Remove</b> button.<br><br>To remove multiple fields, select the fields while holding down the CTRL or SHIFT keys.<br><br>To change the sequence of the fields in the group and the structure of the index entry, select a field and then click the <b>Move Up</b> or <b>Move Down</b> button. |

## Metadata Window

The Metadata Window displays metadata that is associated with, but not displayed on reports. For example, AFP formatted reports can have associated metadata in the form of AFP Tagged Logical Element (TLE) records. The Metadata Window is shown in Figure 6-36.

Metadata is made up of paired keys and values, where a single key may correspond to a single value or multiple values. Both metadata keys and values are alphanumeric character strings. Metadata keys provide a way to "name" or identify the metadata, while metadata values are the metadata character strings.

The Metadata Window allows you to add definitions for metadata fields to a policy in order to make the metadata values available for extracting and exporting.

DocumentDirect attempts to use the metadata key name as the field name when you add a metadata field to the policy. However, if the metadata key name is the same as a field name already assigned to a field in the policy, a unique name is created for the metadata key in the format: FieldN, where "N" is a sequential number. You can change this to another name on the General panel if you choose.

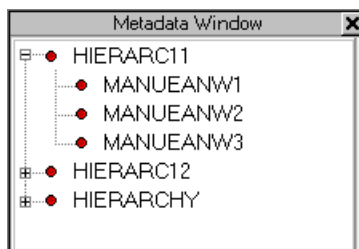


Figure 6-36. Metadata Window

## Using the Metadata Window

The following table describes the functions provided by the Metadata Window:

| To...                                          | Do This...                                                                                                               |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Expand or collapse metadata keys               | Click the plus or minus icons.                                                                                           |
| Open the Metadata Window context menu          | Right-click in the Metadata Window.                                                                                      |
| Create a metadata field definition             | Click the metadata key to select it, then drag it into the Field Window onto a <b>Level</b> . The General panel opens.   |
| Create field definitions for all metadata keys | Right-click in the Metadata Window and select <b>Create All Metadata Fields</b> . The fields appear in the Field Window. |

*Metadata Window Context Menu*

Right-clicking in the Metadata Window displays the context menu as shown in Figure 6-37.

|                            |          |
|----------------------------|----------|
| Hide Panel                 | Esc      |
| Create Field               | Ins      |
| Create All Metadata Fields | Ctrl+Ins |

Figure 6-37. Metadata Window Context Menu

**Using the Metadata Window Context Menu**

The following table describes the functions provided by the Metadata Window context menu:

| Menu Item                  | Description                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hide Panel                 | Hides the Metadata Window.                                                                                                                                                                                                                                                                                                                                                                            |
| Create Field               | Adds a field and displays the General panel for the highlighted metadata key.                                                                                                                                                                                                                                                                                                                         |
| Create All Metadata Fields | Creates fields for all metadata keys, using the metadata key names as field names when possible, using FieldN names when duplicate names exist. If there is one instance of metadata per page, the metadata field is created with a <b>Level</b> of one. When there is more than one instance, the metadata field is created with a <b>Level</b> of two. See "Level Panel" for information on levels. |

**Field Window**

The Field Window displays the defined levels and fields. Levels and fields can be collapsed or expanded by clicking the plus or minus icons. When fields are expanded, the details of the field definition are displayed, including position information, extract criteria, and dependencies.

The levels to which fields are assigned indicate the relative hierarchical relationships among fields. See "Level Panel" for detailed information on levels.

The Field Window is shown in Figure 6-38.

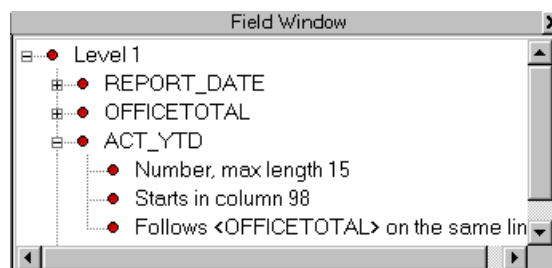


Figure 6-38. Field Window

## Using the Field Window

The following table describes the functions provided by the Field Window:

| To...                                                              | Do This...                                                                                                                                          |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Expand or collapse levels and field detail lines                   | Click the plus or minus icons.                                                                                                                      |
| Open the Field Window context menu                                 | Right-click in the Field Window.                                                                                                                    |
| Open the Field Settings dialog in order to edit a field definition | Double-click the field name in the Field Window.                                                                                                    |
| Add a field to an existing group                                   | Select the field in the Field Window that you want to add to the group, drag it into the Group Window and onto the group item.                      |
| Delete a field                                                     | Click the field name to select it and press the DEL key to delete it from the policy.                                                               |
| Delete a level                                                     | Click the level name to select it and press the DEL key to delete it from the policy. A level that has fields associated with it cannot be deleted. |
| Move a field to a different level                                  | Click the field name to select it and drag it to its new level.                                                                                     |
| View a graphic illustration of field dependencies                  | Click the field name. The dependency is illustrated in the top portion of the Visual Parser window.                                                 |

*Field Window Context Menu*

Right-clicking in the Field Window displays the context menu as shown in Figure 6-39.

|                                |          |
|--------------------------------|----------|
| <u>H</u> ide Panel             | Esc      |
| <u>A</u> dd Field              | Ins      |
| <u>E</u> dit Field             | Enter    |
| <u>D</u> elete Field           | Del      |
| <u>N</u> ew Level              | Ctrl+Ins |
| <u>D</u> elete Last Level      | Del      |
| M <u>o</u> ve to <u>L</u> evel | Ctrl+L   |
| A <u>d</u> d to <u>G</u> roup  | Ctrl+G   |

*Figure 6-39. Field Window Context Menu*

**Using the Field Window Context Menu**

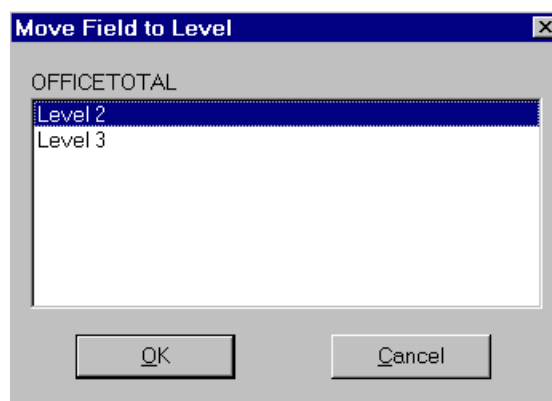
The following table describes the functions provided by the Field Window context menu:

| Menu Item         | Description                                                                                                                |
|-------------------|----------------------------------------------------------------------------------------------------------------------------|
| Hide Panel        | Hides the Field Window.                                                                                                    |
| Add Field         | Adds a field and displays the General panel.                                                                               |
| Edit Field        | Displays the General panel for the highlighted field.                                                                      |
| Delete Field      | Deletes the highlighted field.                                                                                             |
| New Level         | Adds a new level in the Field Window.                                                                                      |
| Delete Last level | Deletes the level with the highest number when the level does not contain any fields. Enabled when a level is highlighted. |
| Move to Level     | Displays the Move Field to Level dialog for the highlighted field. See "Move Field to Level Dialog" for more information.  |
| Add to Group      | Displays the Add Field to Group dialog for the highlighted field. See "Add Field to Group Dialog" for more information.    |

*Move Field to Level Dialog*

The Move Field to Level dialog displays the name of the currently selected field, and the other levels available, and allows you to move the selected field to a different level. The levels to which fields are assigned indicate the relative hierarchical relationships among fields. See "Level Panel" for detailed information on levels.

The Move Field to Level dialog is shown in Figure 6-40.



*Figure 6-40. Move Field to Level Dialog*

*Add Field to Group Dialog*

The Add Field to Group dialog displays the name of the currently selected field, and the other groups available, and allows you to move the selected field to a different group. See "Group Window" for information on groups. The Add Field to Group dialog is shown in Figure 6-41.

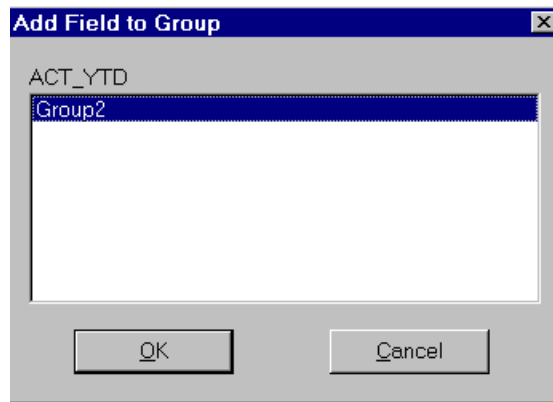


Figure 6-41. Add Field to Group Dialog

**Group Window**

The Group Window displays the fields within each of the existing groups. The Group Window also allows you to create new groups and add fields to existing groups. The Group Window is shown in Figure 6-42.

You use a group to identify what is extracted. The fields that are contained within a group comprise a discrete subset of report data. Create a new group each time you want to use the same policy to extract a different subset of data to be exported to a different file format and/or software application. The same fields can be included in multiple groups. Multiple groups can be included in a single policy.

When a group is selected, the data extracted by that group is displayed in the Sample Window. The top-to-bottom sequence of the fields in the Group Window is the same as the left-to-right sequence of the fields displayed in the Sample Window and the left-to-right sequence of the extracted data.

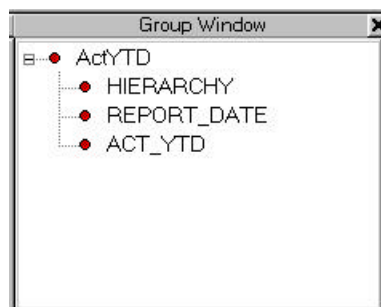


Figure 6-42. Group Window

### Using the Group Window

The following table describes the functions provided by the Group Window:

| To...                              | Do This...                                                                      |
|------------------------------------|---------------------------------------------------------------------------------|
| Expand or collapse groups          | Click the plus or minus icons.                                                  |
| Open the Group Window context menu | Right-click in the Group Window.                                                |
| Copy a field to a different group  | Click the field to select it and drag it to a different group.                  |
| Remove a field from a group        | Click the field to select it and press the DEL key to remove it from the group. |

### Group Window Context Menu

When a group is selected, right-clicking in the Group Window displays the context menu as shown in Figure 6-43. When a field is selected, the **Delete Field** menu item appears in place of the **Delete Group** menu item on the context menu.

|                              |           |
|------------------------------|-----------|
| H <u>ide</u> Panel           | Esc       |
| A <u>dd</u> Group            | Ins       |
| E <u>dit</u> Group           | Enter     |
| D <u>elete</u> Group         | Del       |
| M <u>ove</u> Field Up        | Ctrl+Up   |
| M <u>ove</u> Field Down      | Ctrl+Down |
| A <u>dd</u> to G <u>roup</u> | Ctrl+G    |

Figure 6-43. Group Window Context Menu

### Using the Group Window Context Menu

The following table describes the functions provided by the Group Window context menu:



| Menu Item       | Description                                                                                                                                                                             |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hide Panel      | Hides the Group Window.                                                                                                                                                                 |
| Add Group       | Displays the Group Settings dialog.                                                                                                                                                     |
| Edit Group      | Displays the Group Settings dialog for the highlighted group.                                                                                                                           |
| Delete Field    | Deletes the highlighted field from the group.                                                                                                                                           |
| Delete Group    | Deletes the highlighted group.                                                                                                                                                          |
| Move Field Up   | Moves the highlighted field up one field in the group.                                                                                                                                  |
| Move Field Down | Moves the highlighted field down one field in the group.                                                                                                                                |
| Add to Group    | Displays the Add Field to Group dialog for the highlighted field. See "Add Field to Group Dialog" for more information. Use this option to copy the highlighted field to another group. |

## Sample Window

When a group is selected, a sample of the data extracted by that group is displayed in the Sample Window. Use this data sample to determine if the policy is accomplishing what you want it to accomplish. The Sample Window is shown in Figure 6-44.

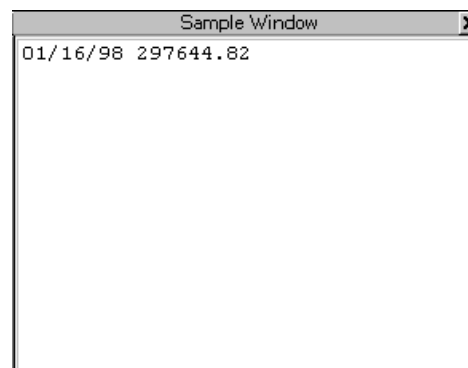


Figure 6-44. Sample Window

## Using the Sample Window

The following table describes the function provided by the Sample Window:

| To...                               | Do This...                        |
|-------------------------------------|-----------------------------------|
| Open the Sample Window context menu | Right-click in the Sample Window. |

*Sample Window Context Menu*

Right-clicking in the Sample Window displays the context menu as shown in Figure 6-45.

|                      |        |
|----------------------|--------|
| <u>H</u> ide Panel   | Esc    |
| Select <u>G</u> roup | Ctrl+G |
| <u>E</u> dit Group   | Enter  |

*Figure 6-45. Sample Window Context Menu*

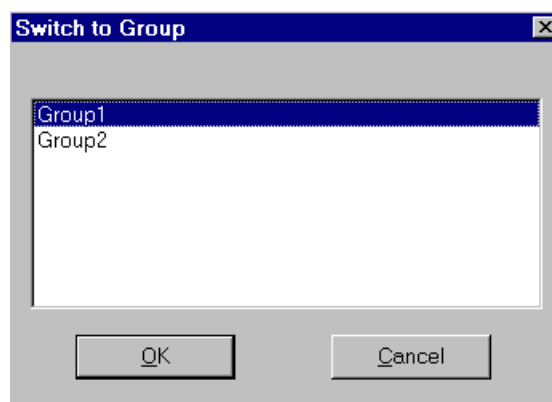
**Using the Sample Window Context Menu**

The following table describes the functions provided by the Sample Window context menu:

| Menu Item    | Description                                                                             |
|--------------|-----------------------------------------------------------------------------------------|
| Hide Panel   | Hides the Sample Window.                                                                |
| Select Group | Displays the Switch to Group dialog. See "Switch to Group Dialog" for more information. |
| Edit Group   | Displays the Group Settings dialog for the highlighted group.                           |

*Switch to Group Dialog*

The Switch to Group dialog displays the groups available and allows you to select a group in order to see a sample of the data extracted by that group. The Switch to Group dialog is shown in Figure 6-46.



*Figure 6-46. Switch to Group Dialog*

## *Examples of Creating Policies*

---

### Sample Policy for a Character Report

The purpose of this example is to illustrate how to create a policy that extracts the report date and the total actual year-to-date revenue amount for a particular office from a monthly revenue report. The report has the following characteristics:

- The report is a character report and contains revenue figures for many offices.
- The report date always appears in the first column and first row.
- The 3-character office code always starts in the 17th column on the 5th row of the report. "NWK" is the office code of the office whose revenue figure is to be extracted.
- The office's total actual year-to-date revenue always appears in the same column.
- The office's total actual year-to-date revenue does not always appear in the same row, but does always appear to the right of the only instance of the "OFFICE TOTAL" label.

The following steps describe how to set up the policy. The steps are sequenced so that the report date, office code, and "OFFICE TOTAL" label are defined first. Then the total actual year-to-date revenue amount is defined and a dependency between the revenue amount and the "OFFICE TOTAL" label is established.

1. Open the report in Document Explorer.
2. Click the **Policy Edit/Create** button on the DocumentDirect toolbar to start the Visual Parser. The Visual Parser window is displayed.
3. In the Visual Parser window, highlight the date of the report and click the **Add Field** button on the Policy toolbar. The General panel is displayed.
4. Enter the name of the field, in this case "ReportDate," select **Date** as the **Field Data Type**, then click **Next**. The Date Attributes panel is displayed.
5. Select the appropriate date format, then click **Next**. The Replacement panel is displayed.
6. Click **Next**. The Dependencies panel is displayed.
7. Select the **Use Fixed Column** and **Use Fixed Row** options and confirm that the correct column and row numbers are displayed. Select **The Field Only Occurs Once Per Page** option and then click **Next**. The Level panel is displayed.
8. Confirm that **Level Number** is "1", then click **Next**. The Summary panel is displayed.

9. Click **Finish**. The Visual Parser window reappears, displaying Level 1 and the ReportDate field in the Field Window.
10. In the Visual Parser window, highlight the office code "NWK" on the report and click the **Add Field** button on the Policy toolbar. The General panel is displayed.
11. Enter the name of the field, in this case "OfficeCode." The **Field Data Type** is already set to **Fixed Length Text**. Click **Next**. The Fixed Length Text Attributes panel is displayed.
12. The **String Length** is already set to "3" and "NWK" appears in the match list. Select the **Match any string in list** option. Click **Next**. The Replacement panel is displayed.
13. Click **Next**. The Dependencies panel is displayed.
14. Select the **Use Fixed Column** and **Use Fixed Row** options and confirm that the correct column and row numbers are displayed. Select **The Field Only Occurs Once Per Page** option and then click **Next**. The Level panel is displayed.
15. Confirm that **Level Number** is "1," then click **Next**. The Summary panel is displayed.
16. Click **Finish**. The Visual Parser window reappears, displaying Level 1 and the ReportDate and OfficeCode fields in the Field Window.
17. In the Visual Parser window, scroll down so the "OFFICE TOTAL" label on the report is displayed, and highlight it. Then click the **Add Field** button. The General panel is displayed. The **Field Name** field is pre-filled, and the **Field Data Type** option is already selected. Change these pre-selected settings if necessary.
18. Click **Next**. The **Fixed Length Text Attributes** panel is displayed.
19. The **String Length** and **Number of Rows** options are already selected, and there is an entry in the match list. Change these pre-selected settings if necessary. Select the **Match any string in list** option, then click **Next**. The Replacement panel is displayed.
20. Click **Next**. The Dependencies panel is displayed.
21. Click **Next**. The Level panel is displayed.
22. Click **Next**. The Summary panel is displayed.
23. Click **Finish** and the Visual Parser window reappears, displaying Level 1 and the ReportDate, OfficeCode, and OFFICE TOTAL fields in the Field Window.
24. In the Visual Parser window, scroll the report so the "ACTUAL YEAR TO DATE" total amount for the office is displayed, and highlight it. Then click the **Add Field** button. The General panel is displayed.
25. Enter the name of the field, in this case, "ActYTD," and select **Number** as the **Field Data Type**, then click **Next**. The Number Attributes panel is displayed.

26. Select the **Maximum length** option and change the length to the maximum number of characters that can appear on the report. Click **Next**. The Replacement panel is displayed.
27. Click **Next**. The Dependencies panel is displayed.
28. Select the **Use Fixed Column** option and adjust the starting column number if necessary. Select **The Field Only Occurs Once Per Page** option.
29. Click the **Add** button. Dashes appear in the list box under the **Field** and **Dependency** headings.
30. Click the dash under the **Field** heading. Field name and dependency options appear.
31. Click the **Field** name drop-down list and select the field name of the field with which you are establishing the dependency, in this case, "OFFICE TOTAL."
32. Click the **Dependency** drop-down list and select the option that describes the dependency you want to establish.
33. Click **Next**. The Level panel is displayed.
34. Click **Next**. The Summary panel is displayed.
35. Click **Finish**. The Visual Parser window reappears, displaying Level 1 and the ReportDate, OfficeCode, OFFICE TOTAL and ActYTD fields.
36. In the Field Window, click the ActYTD field to see a visual confirmation of the established dependency in the Visual Parser window.
37. Click the **Add Group** button on the Policy toolbar. The Group Settings dialog is displayed.
38. Enter the name of the group, in this case, Group1.
39. Click ReportDate in the **Available Fields** pane, then click **Add**. ReportDate appears in the **Fields in the Group** pane..
40. Click ActYTD in the **Available Fields** pane, then click **Add**. This places ActYTD after ReportDate in the **Fields in the Group** pane.
41. Click **OK**. Group1 appears in both the Group and Sample Windows.
42. Look at the contents of the Sample Window to confirm that the policy is successfully extracting the report date and the total actual year-to-date revenue amount for the NWK office. Make changes to field definitions, levels, or groups if necessary.
43. If you are going to use this policy on a monthly basis, use the DocumentDirect **Policy|Save As** menu item to save the policy to a file.
44. When you are finished using the policy, use the DocumentDirect **Policy|Unload**

menu item to unload the policy.

45. On the DocumentDirect menu bar, select **Policy|Edit/Create** to close the Visual Parser window and exit from the Visual Parser.

### Sample Policy for an LPFD Report with Metadata

The purpose of this example is to illustrate how to create a policy that extracts a report date, currency code, foreign exchange-related debit transaction amounts and transaction dates from a bank's Statement of Account. The report has the following characteristics:

- The report is an LPFD report with associated metadata.
- The currency code always appears in columns 49 to 51 and is either "USD" or "DEU."
- The report can contain both debit and credit transaction amounts.
- The debit transaction amounts do not always appear in the same row, but they always appear in the row's second logical field, and, in the same row as, and to the left of, the "FOREIGN EXCHANGE TRANSACTION" transaction label. The debit transaction date always appears to the right of the "FOREIGN EXCHANGE TRANSACTION" label.

The following steps describe how to set up the policy. The steps are sequenced so that the report date, currency code, and label are defined first, then the debit transaction amount and date are defined and dependencies with the label are established.

1. Open the report in Document Explorer.
2. Click the **Policy Edit/Create** button on the DocumentDirect toolbar to start the Visual Parser. The Visual Parser window is displayed.
3. In the Metadata Window, select the Report Date metadata key. With the cursor still on the Report Date, right-click and select **Create Field** from the context menu. The General panel is displayed with the **Field Name** filled in and **Metadata** selected as the **Field Data Type**.
4. Click **Next**. The Metadata Attributes panel is displayed with the **Metadata key** filled in.
5. Click **Next**. The Level panel is displayed.
6. Confirm that **Level Number** is "1", then click **Next**. The Summary panel is displayed.
7. Click **Finish**. The Visual Parser window reappears, displaying Level 1 and the Report Date field in the Field Window.
8. In the Visual Parser window, highlight the "USD" currency code on the report and click the **Add Field** button that is found on the Policy toolbar. The General panel is displayed with the **Field Name** filled in and **Fixed Length Text** selected as the

**Field Data Type.**

9. Change the name of the field to "CurrencyCode," then click **Next**. The Fixed Length Text Attributes panel is displayed.
10. The **String Length** is already set to "3" and "USD" appears in the match list. Select the **Match any string in list** option and enter "DEU" in the **New string match** field, then click **Add**.
11. Click **Next**. The Replacement panel is displayed.
12. Click **Next**. The Dependencies panel is displayed with **Column** set to 49, and **Row** set to 16.
13. Select the **Use Fixed Column** and **Use Fixed Row** options and confirm that the correct column and row numbers are displayed. Select **The Field Only Occurs Once Per Page** option and then click **Next**. The Level panel is displayed.
14. Change **Level Number** to "2", then click **Next**. The Summary panel is displayed.
15. Click **Finish**. The Visual Parser window reappears, displaying Level 2 and the CurrencyCode field in the Field Window below Level 1 and Report Date field.
16. In the Visual Parser window, highlight the words "FOREIGN EXCHANGE TRANSACTION" and click the **Add Field** button. The General panel is displayed with the **Field Name** filled in and **Fixed Length Text** selected as the **Field Data Type**.
17. Change the name of the field to "FXTranLabel," then click **Next**. The **Fixed Length Text Attributes** panel is displayed.
18. The **String Length** and **Number of Rows** options are already selected, and "FOREIGN EXCHANGE TRANSACTION" appears in the match list. Select the **Match any string in list** option, then click **Next**. The Replacement panel is displayed.
19. Click **Next**. The Dependencies panel is displayed.
20. Select the **Use Fixed Column** option. Click **Next**. The Level panel is displayed.
21. Change **Level Number** to "3" and click **Next**. The Summary panel is displayed.
22. Click **Finish** and the Visual Parser window reappears, displaying the new Level 3 and the FXTranLabel field below the other levels and fields in the Field Window.
23. On the DocumentDirect menu bar, select **Policy|Show Logical Fields**. The logical fields are outlined in the Visual Parser window.
24. In the Visual Parser window, highlight the entire logical field that contains the debit transaction amount. Then click the **Add Field** button. The General panel is displayed.

25. Enter the name of the field, in this case, "DBTranAmt" and select **Currency** as the **Field Data Type**. Select the **Use Logical Coordinates** option, then click **Next**. The Currency Attributes panel is displayed with the **Minimum** and **Maximum length** fields set to "1."
26. Select both the **Minimum** and **Maximum length** options and change the **Maximum length** to "20." Click **Next**. The Replacement panel is displayed.
27. Click **Next**. The Dependencies panel is displayed with **Index** set to "2" and **Row** set to "22."
28. Select the **Use Fixed Index** option. Click the **Add** button. Dashes appear under the **Field** and **Dependency** headings.
29. Click the dash under the **Field** heading. Field name and dependency options appear.
30. Click the **Field** name drop-down list and select the field name of the field with which you are establishing the dependency, in this case, "FxTranLabel."
31. Click the **Dependency** drop-down list and select the option that describes the dependency you want to establish, in this case, "is after DBTranAmt on same row."
32. Click **Next**. The Level panel is displayed.
33. Change the **Level** to "3." Click **Next**. The Summary panel is displayed.
34. Click **Finish**. The Visual Parser window reappears displaying the DBTranAmt field below the FxTranLabel field.
35. Enter the name of the field, in this case "DBTranDate" and select **Date** as the **Field Data Type**. Select the **Use Logical Coordinates option**, then click **Next**. The Date Attributes panel is displayed.
36. Select the appropriate date format, then click **Next**. The Replacement panel is displayed.
37. Click **Next**. The Dependencies panel is displayed.
38. Select the **Use Fixed Index** option. Click the **Add** button. Dashes appear under the **Field** and **Dependency** headings.
39. Click the dash under the **Field** heading. Field name and dependency options appear.
40. Click the **Field** name drop-down list and select the field name of the field with which you are establishing the dependency, in this case, "FxTranLabel."
41. Click the **Dependency** drop-down list and select the option that describes the dependency you want to establish, in this case, "is before DBTranAmt on same row."
42. Click **Next**. The Level panel is displayed.



43. Change the **Level** to "3." Click **Next**. The Summary panel is displayed.
44. Click **Finish**. The Visual Parser window reappears displaying the DBTranDate field below the DBTranAmt field.
45. Click the **Add Group** button on the Policy toolbar. The Group Settings dialog is displayed
46. Enter the group name, in this case, Group1.
47. Click Report Date in the **Available Fields** pane, then click **Add**. ReportDate appears in the **Fields in the Group** pane.
48. Click CurrencyCode in the **Available Fields** pane, then click **Add**. Click DBTranDate in the **Available Fields** pane, then click **Add**. Click DBTranAmt in the **Available Fields** pane, then click **Add**. This places CurrencyCode, DBTranDate, and DBTranAmt in the **Fields in the Group** pane.
49. Click **OK**. Group1 appears in both the Group and Sample Windows.
50. Look at the contents of the Sample Window to confirm that the policy is successfully extracting the report date, currency code, and the transaction dates and amounts of all "USD" and "DEU" foreign exchange transactions on the Statement of Account. Make changes to field definitions, levels, or groups if necessary.
51. If you are going to use this policy on a monthly basis, use the DocumentDirect **Policy|Save As** menu item to save the policy to a file.
52. When you are finished using the policy, use the DocumentDirect **Policy|Unload** menu item to unload the policy.
53. On the DocumentDirect menu bar, select **Policy|Edit/Create** to close the Visual Parser window and exit from the Visual Parser.

## Chapter 7. Exporting Data

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### Introduction

This chapter tells you how to extract data from local or online reports and make it available to other software applications. It contains examples of various ways the Export function can be used.

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## ***Exporting Data: Overview***

---

DocumentDirect provides a variety of ways to export ViewDirect server-resident report data to client applications:

- Use DocumentDirect as a Dynamic Data Exchange (DDE) server to establish links between online or local reports and client software packages. Once DDE links are established, client applications receive updated data directly from the source reports. This option works in conjunction with script commands, which are discussed in Chapter 5.
- Use the Add Attributes and Export commands to write data into ASCII, CSV, SYLK, or XML format and store it in a file that can then be opened into other software applications like any other file. Used in conjunction with Flexible Marks, Add Attributes provides a means of exporting data from reports for which the format changes from version to version.
- Create Dynamic Marks to automatically search, mark, and prepare for export all

occurrences of specific data.

- Copy text or images to the clipboard, then paste it into other applications. You can copy an entire page or a marked area. Text is copied based on the current view and as plain text, for example, without any fonts or font styles applied.
- Export a displayed page in ASCII text. Only entire pages can be exported to ASCII. They are exported based on the current view and as plain text, for example, without any fonts or font styles applied.
- Export fields defined by a policy into CSV, SYLK, or XML format.
- Append exported data in ASCII or CSV format to existing files of the same format.
- Build any of these options into script files, so whichever method you use, data extraction is completed with the execution of a single script. See Chapter 5 for more information on scripts.

## ***Exporting Data Through the Clipboard***

---

This procedure uses the Windows Clipboard as a quick and easy means of delivering data to client applications. Pages are copied to the Clipboard as they appear in the current view. If the view contains blank spaces or lines, all such characters appear in the exported data. However, if the view contains overstrike characters, the overstrike characters do not appear in the exported data.

You can copy the following types of data to the Clipboard:

- LPFD graphic images, such as statements and invoices created using any of the following data formats:
  - ◆ Adobe PostScript
  - ◆ Adobe PDF
  - ◆ Hewlett-Packard PCL
  - ◆ IBM AFP
  - ◆ Xerox DJDE/Metacode
- Graphic images, such as checks, letters, and photographs
- Plain text, such as text without any fonts or font styles applied

To copy data to the Clipboard, perform the following steps:

1. Open the report or topic from which you want to export data. See Chapter 2 for detailed instructions on opening reports and topics. Go to the page containing the data you want to export. Rearrange the view, if necessary, to suit your needs.

2. Open the **Edit** menu and select **Copy to Clipboard....** The dialog shown in Figure 7-1 is displayed.

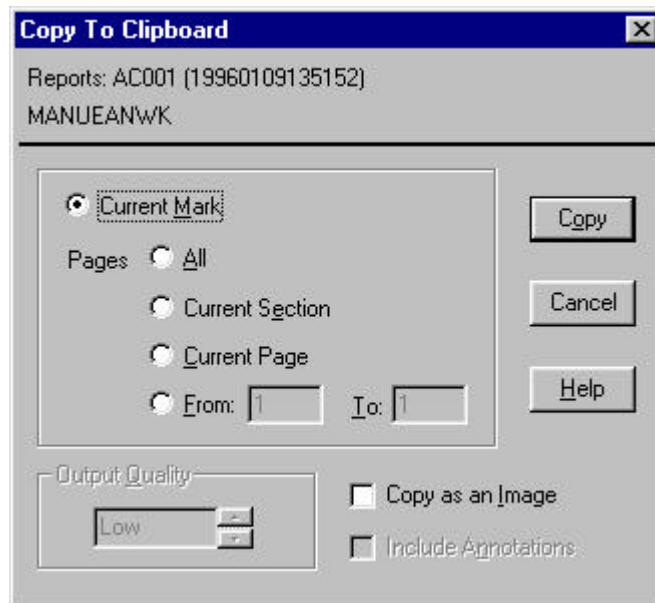


Figure 7-1. The Copy To Clipboard Dialog

The Copy To Clipboard dialog fields are described as follows:

| Dialog Field        | Description                                                                                                                                                                                                   |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Current Mark        | Copies the marked area of the displayed document                                                                                                                                                              |
| All                 | Copies the entire report                                                                                                                                                                                      |
| Current Section     | Copies the section currently displayed                                                                                                                                                                        |
| Current Page        | Copies the page currently displayed                                                                                                                                                                           |
| From                | Sets the number of the first page you want to copy                                                                                                                                                            |
| To                  | Sets the number of the last page you want to copy                                                                                                                                                             |
| Output Quality      | Sets the resolution of the copied image. <ul style="list-style-type: none"><li>• Low - Resolution of the current monitor, usually 96 or 120 dpi</li><li>• Medium - 240 dpi</li><li>• High - 480 dpi</li></ul> |
| Copy as an Image    | Creates and copies a graphic image from text                                                                                                                                                                  |
| Include Annotations | Copies annotations from the current view to the copied graphic image                                                                                                                                          |

3. Set the appropriate fields of the Copy To Clipboard dialog as follows:
  - For LPFD graphic images, select the following:
    - ♦ Either Current Mark or Current Page
    - ♦ Output Quality
    - ♦ If you want to include annotations in the copied image, Include Annotations.
  - For graphic images other than LPFD, select the following:
    - ♦ Either Current Mark or Current Page
    - ♦ If you want to include annotations in the copied image, Include Annotations.
  - For text documents to be copied as images, select the following:
    - ♦ Copy as an Image
    - ♦ If you want to include annotations in the copied image, Include Annotations.
  - For text documents, select All, Current Section, Current Page, or From/To.
4. Click **Copy**. The sections, pages, or blocks specified in step 3 are copied to the Clipboard. The exported data can now be pasted into other software packages.

### ***Exporting Report Pages in ASCII***

---

This procedure exports pages of text to a file in ASCII format. Pages are exported to ASCII based on the current view and as plain text, for example, without any fonts or font styles applied. If the screen image contains blank spaces or lines, all such characters appear in the exported data. However, if the view contains overstrike characters, the overstrike characters do not appear in the exported data.

1. Open the report or topic from which you want to export data. See Chapter 2 for detailed instructions on opening reports and topics. Go to the page containing the data you want to export. Rearrange the view, if necessary, to suit your needs.
2. Open the **File** menu and select **Export**. The Export To File dialog is displayed, as shown in Figure 7-2.

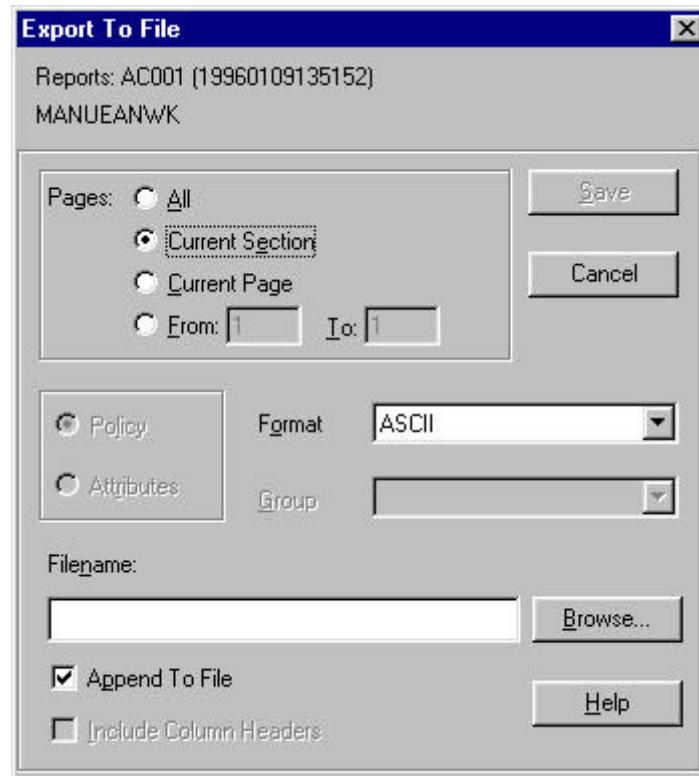


Figure 7-2. The Export To File Dialog

3. In the Export To File dialog, specify the following:
  - In the Pages field, select one of the following:
    - ♦ **All** to export the entire report.
    - ♦ **Current Section** to export the section currently displayed.
    - ♦ **Current Page** to export the page currently displayed.
    - ♦ **From/To** and enter the range of pages you want to export.
  - In the **Filename** field, specify the path and filename to which you want to export the data, or use the Browse button to locate the filename. If you specify an existing filename, a warning message is displayed, informing you that the filename already exists. Click **OK** to proceed, or **No** to choose another filename.
  - To append the exported data to an existing file of the same format, click the check box next to **Append To File**.
4. Click **Save**. The data is written to the destination specified in step 4.

## Exporting Fields

You can export data fields based on their physical position on the report, their position in

relation to other fields, and whether their content meets detailed extract criteria. Position information and extract criteria are defined in a policy. For information on creating policies, see Chapter 6.

To export fields, complete the following steps:

1. Open the report or topic from which you want to export data. Go to the page that contains the data you want to export.
2. Open the **Policy** menu and select **Load**. The Load Policy dialog is displayed as shown in Figure 7-3. Select the policy containing definitions of fields you want to export and click **Open**.

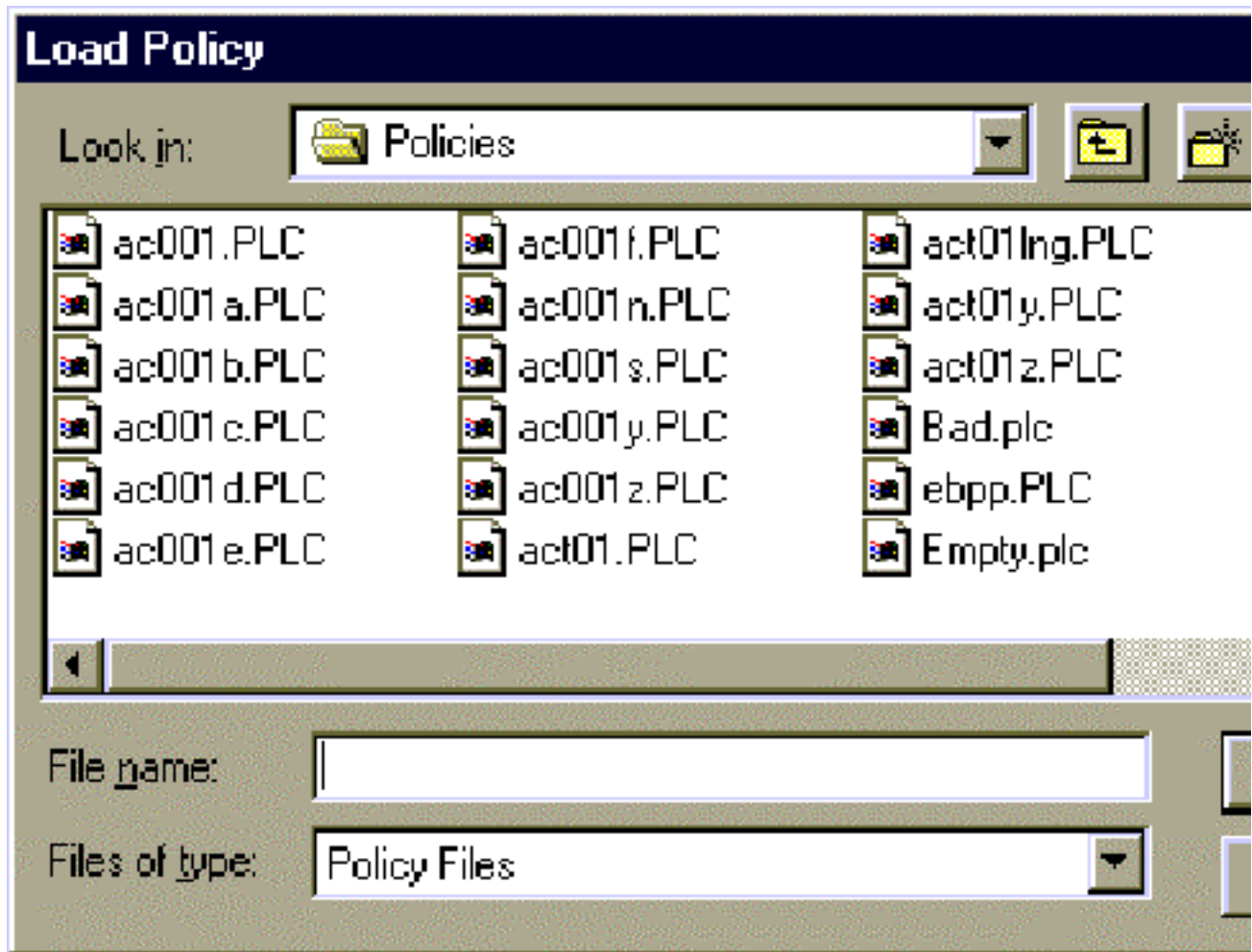


Figure 7-3. The Load Policy Dialog

3. Open the **File** menu and select **Export**. The Export To File dialog is displayed as shown in Figure 7-2.
4. In the Export To File dialog, specify the following:
  - In the Pages field, select one of the following:

- ◆ **All** to export the entire report.
  - ◆ **Current Section** to export the section currently displayed.
  - ◆ **Current Page** to export the page currently displayed.
  - ◆ **From/To** and enter the range of pages you want to export.
- 
- Select **Policy**.
  - From the drop-down list of the **Format** field, select CSV, SYLK, or XML.
  - From the drop-down list of the **Group** field, select the group that contains the fields you want to export.
  - In the **Filename** field, specify the path and filename to which you want to export the data, or use the Browse button to locate the filename. If you specify an existing filename, a warning message is displayed, informing you that the filename already exists. Click **OK** to proceed, or **No** to choose another filename.
  - To append the exported data to an existing file of the same format, click **Append To File**. **Note:** This function is available only for ASCII or CSV formats.
  - To export field names as column headers, click the check box next to Include Column Headers.
5. Click **Save**. The file is written to the destination specified in step 4.

### ***Marking Text to Be Exported***

---

This procedure assumes you need to export specific data from a report that always has the same format, such as a report in which only the numbers change from version to version. If you need to export data from a report in which the format changes from version to version, see "Creating Flexible Marks," later in this chapter. If you need to export all occurrences of specific data from a report, see "Creating Dynamic Marks," later in this chapter.

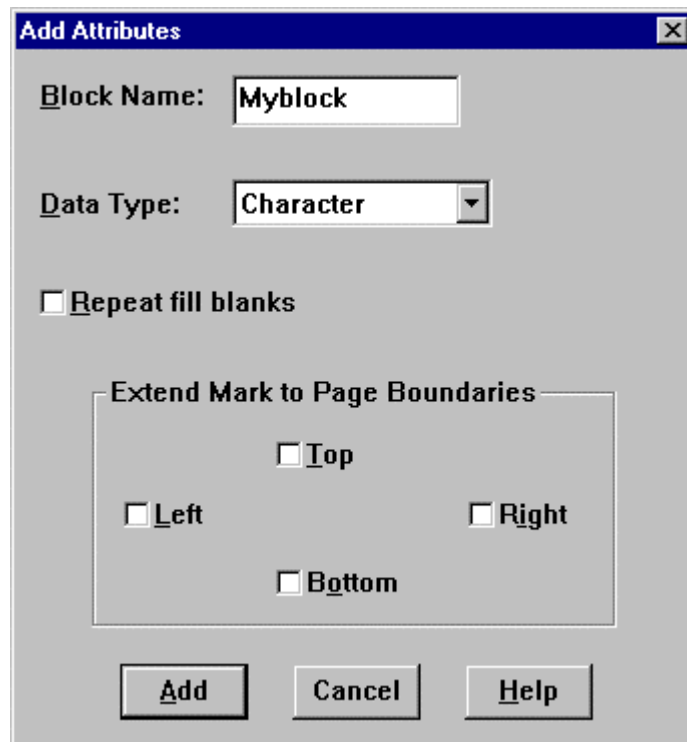
1. Open the report or topic from which you want to copy data. See Chapter 2 for detailed instructions on opening reports and topics. Go to the page containing the data you want to export. Rearrange the view, if necessary, to suit your needs.
2. Mark the first block of text you want to export by clicking and dragging the mouse over it.
3. Open the **Edit** menu and select **Add Attributes**. The Add Attributes dialog appears, as shown in Figure 7-4.
  - In the **Block Name** field, type a block name for the text you marked.
  - If the marked text is all numbers, you can open the **Data Type** list box and



select data type Number. See "Edit Menu Functions" for details on available data types.

- If you want blank lines in the marked text to contain the same data as the line above, such as line labels or page numbers, click the **Repeat fill blanks** box.
- To extend the mark, click the appropriate box to extend the mark to the top, left, right, or bottom of the page.

After you add the desired attributes, click **Add**.



*Figure 7-4. The Add Attributes Dialog*

4. Repeat steps 2 and 3 for all blocks of data you want to export.
5. Open the **File** menu and select **Export**. The Export To File dialog is displayed, as shown in Figure 7-2.
6. In the Export To File dialog, specify the following:
  - In the Pages field, select one of the following:
    - ♦ **All** to export the entire report.
    - ♦ **Current Section** to export the section currently displayed.
    - ♦ **Current Page** to export the page currently displayed.
    - ♦ **From/To** and enter the range of pages you want to export.

- Select **Attributes**.
  - In the **Format** field, select CSV or SYLK.
  - In the **Filename** field, specify the path and filename to which you want to export the data, or use the Browse button to locate the filename. If you specify an existing filename, a warning message is displayed, informing you that the filename already exists. Click **OK** to proceed, or **No** to choose another filename.
  - To append the exported data to an existing file of the same format, click **Append To File**. **Note:** This function is available only for ASCII or CSV formats.
7. Click **Save**. The file writes to the destination specified in step 6. The exported pages are now stored under the filename you assigned, ready to be incorporated into other software packages.

### ***Dynamic and Flexible Marks: Overview***

---

In addition to the data exporting options discussed earlier in this chapter, DocumentDirect provides features that allow you to mark data for export dynamically, and to create flexible marks that can extract data from reports with changing formats. Using these features, you can:

- Find and mark all occurrences of specific data, and view, export, and print only that data, or the pages containing that data.
- Find and mark text in reports that change in format from version to version.

These features require text for which you can search, such as line labels or column headings, that always appears in predictable proximity to the data you want to export. They operate through the **Find** and **Set Origin** commands available on the **Edit** menu. See "Edit Menu Functions" later in this chapter for a complete description of these commands.

### ***Creating Dynamic Marks***

---

The following procedure assumes you need to mark all occurrences of specific data in a report. It uses the **Find** and **Set Origin** commands to define pages to be displayed. For this procedure to work effectively, the report must contain data you can locate with the **Find** command.

Keep the following in mind when you use this feature:

- This feature displays only the pages *exactly* matching the search strings used in the **Find** and **Set Origin** commands.
- To extract multiple text blocks on a page, you must perform the **Find** and **Set Origin** command sequence for each item on the page. Note that only pages

containing all search strings are extracted.

To create dynamic marks, perform the following steps:

1. Open the report or topic from which you want to export data. See Chapter 2 for detailed instructions on opening reports and topics.
2. Open the **Edit** menu and select **Find**. Search for text relevant to the data you need to extract, such as a column heading or line label. When the caret stops at the found text, open the **Edit** menu and select **Set Origin**. From this point, only pages containing this search string are displayed. If you previously specified **Find** and **Set Origin** commands, only pages containing all search strings are displayed.
3. Mark the text you want to export and assign attributes to it. All the text marking features of DocumentDirect are available for this step.
4. Do one of the following:
  - If you want to mark more data, and that data always appears in the same position relative to your previous mark, mark the data and assign attributes.
  - If you want to mark more data on the same page, and that data may appear in a different position in subsequent pages, open the **Edit** menu and select **Reset Origin**. Repeat steps 2 and 3.
  - If you marked all the data you want to export, proceed with the appropriate data exporting procedure, as described earlier in this chapter. Only pages containing strings matching those located with the **Find** and **Set Origin** command export.
  - If you need to view the marked data, press **Page Down** to view the next page containing similar data. Only pages matching the search string used in the find display.

## ***Creating Flexible Marks***

---

The following procedure assumes you need to export data from reports for which the format changes from version to version, such as reports with varying numbers of lines or columns.

To create flexible marks, perform the following steps:

1. Open the report or topic from which you want to export data. See Chapter 2 for detailed instructions on opening reports and topics. Go to the page containing the data you want to export. Rearrange the view, if necessary, to suit your needs.  
  
**Note:** If the beginning position of the export data is always the same, go to step 3.
2. Open the **Edit** menu and select **Find**. Search for text to indicate the starting point of the data you want to extract, such as a column heading or line label, for example, column heading Planned MTD. When the caret stops at the found text, open the **Edit** menu and select **Set Origin**. From this point, only pages containing

this search string are displayed. If you previously specified **Find** and **Set Origin** commands, only pages containing all search strings are displayed.

3. Position the caret at the start of the data you want to export, for example the beginning of the first row under the column heading Planned MTD. Open the **Edit** menu and select **Drop Anchor**. A character resembling a backwards "L" appears at the caret position, indicating the starting position of your mark. Open the **Edit** menu and select **Reset Origin**.
4. Open the **Edit** menu and select **Find**. Search for text to indicate the ending point of the data you want to extract, such as the row labeled Office Total at the bottom of the column. When the caret stops at the found text, open the **Edit** menu again and select **Set Origin**. If you previously specified **Find** and **Set Origin** commands, only pages containing all search strings are displayed.
5. Position the caret at the end of the data you want to export, for example, the last row of the Planned MTD column immediately before the row labeled Office Total. Open the **Edit** menu and select **Mark Anchor to Caret**. Everything between the starting point and the ending point—starting, for example, at the column heading Planned MTD, and ending at the row labeled Office Total—is marked for export on each page that contains those same starting and ending points. The entire column labeled Planned MTD is marked up to the Office Total row on each page, regardless of the number of rows between them.
6. Open the **Edit** menu and select **Add Attributes**. The Add Attributes dialog appears, as shown in Figure 7-4.
  - In the **Block Name** field, type a block name for the marked text.
  - If the marked text is all numbers, you have the option of opening the **Data Type** list box and selecting data type Number. See "Edit Menu Functions" for details on available data types.
  - If you want blank lines in the marked text to contain the same data as the line above, for example, line labels or page numbers, click the **Repeat fill blanks** box.
  - If you want to extend the mark, click the appropriate box to extend the mark to the top, left, right, or bottom of the page.

After you add the desired attributes, click **Add**.

7. If you want to mark more blocks of data, open the **Edit** menu and select **Reset Origin**. Repeat steps 2 through 6 for all the blocks of data you want to mark.
8. Open the **File** menu and select **Export**. The Export To File dialog is displayed, as shown in Figure 7-2.
9. In the Export To File dialog, specify the following:
  - In the Pages field, select one of the following:
    - ♦ **All** to export the entire report.

- ◆ **Current Section** to export the section currently displayed.
  - ◆ **Current Page** to export the page currently displayed.
  - ◆ **From/To** and enter the range of pages you want to export.
- Select **Attributes**.
  - In the **Format** field, select CSV or SYLK.
  - In the **Filename** field, specify the path and filename to which you want to export the data, or use the Browse button to locate the filename. If you specify an existing filename, a warning message is displayed, informing you that the filename already exists. Click **OK** to proceed, or **No** to choose another filename.
  - To append the exported data to an existing file of the same format, click **Append To File**. **Note:** This function is available only for ASCII or CSV formats.
10. Click **Save**. The file is written to the destination specified in step 9. The exported pages are now stored under the filename you assigned, ready to be incorporated into other software packages.

### ***Hints for Exporting***

---

DocumentDirect offers a depth of power and functionality to help you export data. The procedures in this chapter present only a few specific exporting scenarios. However, DocumentDirect is a flexible tool; experimentation helps you find working methods more closely tailored to your specific needs and software. Several pointers may prove useful for users who are developing customized solutions:

- It is a good idea to mark text for export by columns. While you can export by lines, your output is probably more accurately formatted if you mark blocks in columns instead of lines. Columns are also imported more easily into spreadsheet applications.
- If you need to export lines of text that contain multiple entries, such as a Totals line, it may be easiest to export the data, then parse the line's contents with the client software.
- When you add attributes to blocks of data, be careful to choose the appropriate data type. For example, if the block includes alphabetic characters, select data type Character; defining such data as Number results in loss of all non-numeric characters. See "Edit Menu Functions" later in this chapter for a more detailed description of data types.
- When you add attributes to data, it does not matter in which order you select the blocks. DocumentDirect assembles the blocks in a format corresponding to the page view with which you are working. In general, rearrange the view before adding attributes. Exported blocks automatically mirror the format of your

customized view as closely as possible.

- When you export data to ASCII, CSV, SYLK, or XML files, DocumentDirect assigns the following filename extensions by default:

|   |        |      |
|---|--------|------|
| ◆ | ASCII: | .RPT |
| ◆ | CSV:   | .CSV |
| ◆ | SYLK:  | .SLK |
| ◆ | XML:   | .XML |

Some client software packages may not recognize the .RPT extension on ASCII files. You may need to assign a different extension, such as .TXT, to ASCII data files.

- If you create a script designed to save information under a given filename, it stores data to the same filename every time you execute the script. The current file replaces the previous version without warning. If you need to keep your downloaded report files from day to day, be sure that subsequent versions do not overwrite them. Alternatively, add the exported data to an existing file by inserting the optional script parameter Append.

## ***Building DDE Links***

---

DocumentDirect functions as a Dynamic Data Exchange (DDE) server to transfer information to client applications. DDE enables transfer of data from a mainframe report to a spreadsheet, for example, by updating links in the spreadsheet. Often this can be accomplished simply by opening the spreadsheet.

The following DDE Link procedures produce script files that serve as valid DDE topics, and blocks that serve as valid DDE items.

## **Building Policy-Based DDE Links**

1. Open the **Script** menu and select **Start Recording**.
2. Open the report in which you want to build a DDE link. For detailed instructions on opening reports, see Chapter 2. Go to the page containing the data you want to link.

**Note:** For the purposes of DDE linking, ViewDirect server access via Enterprise Topics is not allowed.

3. Load the policy you want to use for this report by opening the Policy menu and selecting Load. The Load Policy dialog is displayed. Select the policy and click Open.
4. Open the **File** menu and select **Set DDE Scope**. The Scope dialog is displayed, as shown in Figure 7-5.

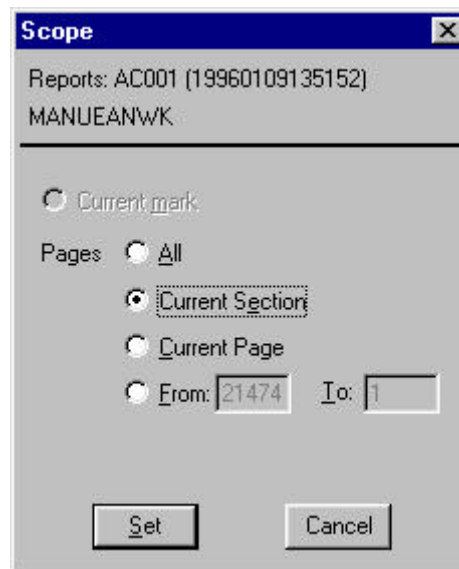


Figure 7-5. The Scope Dialog

5. Choose the range of pages to be addressed by the DDE link:
  - Select **All** to address the entire report.
  - Select **Current Section** to address the section currently displayed.
  - Select **Current Page** to address the page currently displayed.
  - Select **From/To** and enter the range of pages you want to address.

After you specify the pages to be included in the link, click **Set**.

6. Open the **Script** menu and select **Save**. The Write Script To File dialog appears, as shown in Figure 7-7.
7. Do one of the following:
  - In the **File Name** field, specify the path and filename to which you want to export data.
  - Select the destination drive and directory from the **Drives** and **Directories** menus, then specify a filename for the script.

After you name the script, click **OK**. The script is saved to the designated directory, and the dialog closes.

8. Open the **Script** menu and select **Stop Recording**.

If you are going to record another script, be sure to select **Clear** on the **Script** menu. This clears script commands from current memory. See "Script Menu Functions" in Chapter 5 for more information on recording scripts.

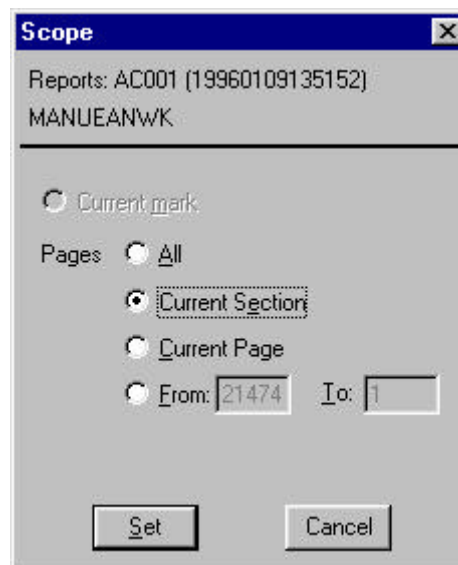
**Building DDE Links in a Report with a Consistent Format**

1. Open the **Script** menu and select **Start Recording**.
2. Open the report to which you want to establish a DDE link. See Chapter 2 for detailed instructions on opening reports. Access the version, section, and page containing the data you want to link.  
  
**Note:** For the purposes of DDE linking, ViewDirect server access via Enterprise Topics is not allowed.
3. Mark the first block of text you want to link by clicking and dragging the mouse over it. If you are linking data that appears on subsequent pages in different positions but with the same number of rows and columns, you can mark the data with a dynamic mark as described in "Creating Dynamic Marks."
4. Open the **Edit** menu and select **Add Attributes**. The Add Attributes dialog is displayed, as shown in Figure 7-4.
  - In the **Block Name** field, type a block name for the text you marked.
  - If the marked text is all numbers, you can open the **Data Type** list box and select data type Number. See "Edit Menu Functions" for details on available data types.

After you add the desired attributes, click **Add**.

**Note:** For DDE links, the **Repeat fill blanks** option is not available.

5. Repeat steps 3 and 4 for all blocks you want to link.
6. Open the **File** menu and select **Set DDE Scope**. The Scope dialog is displayed, as shown in Figure 7-6.



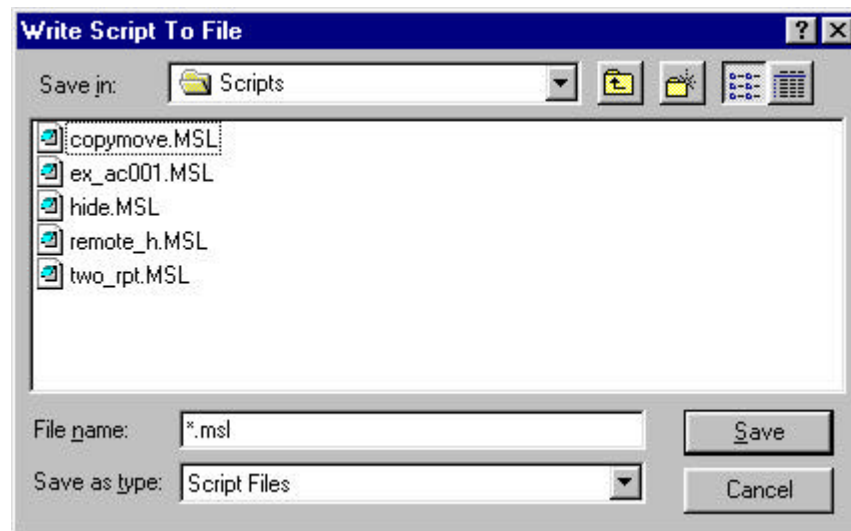


*Figure 7-6. The Scope Dialog*

7. Choose the range of pages to be addressed by the DDE link:
  - Select **All** to address the entire report.
  - Select **Current Section** to address the section currently displayed.
  - Select **Current Page** to address the page currently displayed.
  - Select **From/To** and enter the range of pages you want to address.

After you specify the pages to be included in the link, click **Set**.

8. Open the **Script** menu and select **Save**. The Write Script To File dialog appears, as shown in Figure 7-7.

*Figure 7-7. The Write Script To File Dialog*

9. Do one of the following:
  - In the **File name** field, specify the path and filename to which you want to export data.
  - Select the destination drive and directory from the **Drives** and **Directories** menus, then specify a filename for the script.

After you name the script, click **OK**. The script is saved to the designated directory, and the dialog closes.

10. Open the **Script** menu and select **Stop Recording**.

If you are going to record another script, be sure to select **Clear** on the **Script** menu. This clears all script commands from current memory. See "Script Menu Functions" in Chapter 5 for more information on recording scripts.

**Building DDE Links in a Report with a Changing Format**

1. Open the **Script** menu and select **Start Recording**.
2. Open the report in which you want to build a DDE link. See Chapter 2 for detailed instructions on opening reports. Go to the page containing the data you want to link.

**Note:** For the purposes of DDE linking, ViewDirect server access via Enterprise Topics is not allowed.

3. Do one of the following:
  - If the beginning position of the linked data is always the same, go to step 4.
  - Open the **Edit** menu and select **Find**. Search for text relevant to the start of the data you need to link, such as a column heading or line label. When the caret stops at the found text, open the **Edit** menu and select **Set Origin**. From this point, only pages containing this search string are displayed. If you previously specified **Find** and **Set Origin** commands, only pages containing all search strings are displayed.
4. Position the caret at the start of the data you want to export. Open the **Edit** menu and select **Drop Anchor**. A character resembling a backwards "L" appears at the caret position, indicating the starting point of your mark. Open the **Edit** menu and select **Reset Origin**.
5. Open the **Edit** menu and select **Find**. Search for text relevant to the end of the data you need to link, such as Total at the bottom line of a report. When the caret stops at the found text, open the **Edit** menu again and select **Set Origin**. If you previously specified **Find** and **Set Origin** commands, only pages containing all search strings are displayed.
6. Position the caret at the end of the data you want to export. Open the **Edit** menu and select **Mark Anchor to Caret**. This marks the first block of linked data.
7. Open the **Edit** menu and select **Add Attributes**. The Add Attributes dialog appears, as shown in Figure 7-4.
  - In the **Block Name** field, type a block name for the marked text.
  - If the marked text is all numbers, you can open the **Data Type** list box and select data type Number. See "Edit Menu Functions" for details on available data types.

After you add the desired attributes, click **Add**.

**Note:** For DDE links, the **Repeat fill blanks** option is not available.

8. If you need to mark more blocks, open the **Edit** menu and select **Reset Origin**. Repeat steps 3 through 7 for all blocks you want to mark.
9. Open the **File** menu and select **Set DDE Scope**. The Scope dialog is displayed, as

shown in Figure 7-6.

10. Choose the range of pages to be addressed by the DDE link:

- Select **All** to address the entire report.
- Select **Current Section** to address the section currently displayed.
- Select **Current Page** to address the page currently displayed.
- Select **From/To** and enter the range of pages you want to address.

After you specify the pages to be included in the link, click **Set**.

11. Open the **Script** menu and select **Save**. The Write Script To File dialog appears, as shown in Figure 7-7.

12. Do one of the following:

- In the **File Name** field, specify the path and filename to which you want to export data.
- Select the destination drive and directory from the **Drives** and **Directories** menus, then specify a filename for the script.

After you name the script, click **OK**. The script is saved to the designated directory, and the dialog closes.

13. Open the **Script** menu and select **Stop Recording**.

If you are going to record another script, be sure to select **Clear** on the **Script** menu. This clears script commands from current memory. See "Script Menu Functions" in Chapter 5 for more information on recording scripts.

### ***Hints for DDE Linking***

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- DDE linking procedures result in a stored script file from which other software packages can receive data. In general, other applications address RDSWIN as the *application*, the script filename as the *topic*, and the individual block names, given when you add attributes, as *items*. Only one block can be addressed by a given DDE link. For example, if you want to link three separate columns of data, you must link each column separately.
- DDE links require the use of scripts. However, scripts must not close the window containing the text to be exported. When the DDE export completes, the window closes automatically.
- For DDE links to work, DocumentDirect must be running with the client software package.
- If you need to use DDE links frequently:

- ◆ Try putting both DocumentDirect and the client application into your Windows Startup group, so both applications are available when you start Windows.
- ◆ Build a script to perform data extraction automatically upon startup. Using the command line option, you can have DocumentDirect perform the script upon startup, so the data is available when you start the program. See "Automating Scripts," in Chapter 5.
- DocumentDirect supports automatic and manual update links. Using automatic links prevents client software packages from discontinuing DDE links that exceed client-imposed time-out limits. When you use an automatic update DDE link, you receive the following message upon requesting the link:

```
W090I- Please wait. Processing your request for block 'xxx' defined in  
script 'yyy'
```

Once the data is ready, this message terminates, and the data is displayed. If you use a manually updating DDE link, no message is displayed, and the time-out parameters of the client software package may terminate the link.

- We recommend storing scripts in a script working directory. To specify this directory, open the **Scripts** menu and select **Settings**. Enter a directory in the Working directory field. The working directory is the first directory DocumentDirect searches when you select **Playback**.

## ***Establishing Policy-Based DDE Links in Client Applications***

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You can build DDE links in client applications, such as Lotus 1-2-3, Microsoft Excel, and Microsoft Word. You can use these DDE links to transfer data from fields defined in a policy. For information on creating policies, see Chapter 6.

For links to work, DocumentDirect must be running, and you must have created a script to which the DDE link refers. In the procedures below, filename.msl is the full path (required if the script is not located in DocumentDirect's script working directory) and filename of the script and blockname is the name of the block of text marked in the script.

- Microsoft Excel:
  1. In an open spreadsheet, click the cell where the linked data should appear. If you are linking more than one cell, click the first cell in the series of cells to be linked.
  2. Type **=RDSWIN!filename.msl!groupname::fieldname**. If the policy contains only one group, groupname is optional. A group is a collection of fields.
  3. Press **Control + Shift + Enter**.
  4. Repeat steps 1 through 3 for each link you create.
  5. Highlight all the cells into which you want to enter data from the first link.
  6. Press **F2** to activate the formula bar.
  7. Press **Control + Shift + Enter** to display all the data for the first link.
  8. Repeat steps 5 through 7 for each link you create.

- Lotus 1-2-3:
  1. Open the **Edit** menu.
  2. Select **Links...**
  3. Select **Create...**
  4. Enter the following information in the appropriate fields:

|             |                                                                                                                               |
|-------------|-------------------------------------------------------------------------------------------------------------------------------|
| Application | <b>RDSWIN</b>                                                                                                                 |
| Topic       | <b>filename.msl</b>                                                                                                           |
| Item        | <b>groupname::fieldname.</b> If the policy contains only one group, groupname is optional. A group is a collection of fields. |
| Update Mode | <b>automatic</b>                                                                                                              |
- Microsoft Word:
  1. Place the cursor where you want the DDE link to take effect.
  2. Press **Control + F9** to insert a blank field code.
  3. Type **DDEAUTO RDSWIN filename.msl groupname::fieldname.** If the policy contains only one group, groupname is optional. A group is a collection of fields.
  4. Press **F9** to update the field and display the data returned by the script.
  5. If the field definition remains displayed, instead of the script data, press **Shift + F9** or right-click the field definition and select **Toggle Field Codes**.

## ***Establishing DDE Links in Client Applications***

---

DocumentDirect functions as a DDE server, through which client applications can establish DDE links to report data. Software packages that support DDE functionality can access that data automatically via DDE linking. This section describes methods to help you get started with DDE links in Lotus 1-2-3, Microsoft Excel, and Microsoft Word. Refer to your client application's Help system for complete information on how to implement links.

For links to work, DocumentDirect must be running, and you must have created a script to which the DDE link refers. In the procedures below, filename.msl is the full path (required if the script is not located in DocumentDirect's script working directory) and filename of the script and blockname is the name of the block of text marked in the script.

- Microsoft Excel:
  1. In an open spreadsheet, click the cell where the linked data should appear. If you are linking more than one cell, click the first cell in the series of cells to be linked.
  2. Type **=RDSWIN!filename.msl!blockname.**

3. Press **Control + Shift + Enter**.
  4. Repeat steps 1 through 3 for each link you create.
  5. Highlight all the cells into which you want to enter data from the first link.
  6. Press **F2** to activate the formula bar.
  7. Press **Control + Shift + Enter** to display all the data for the first link.
  8. Repeat steps 5 through 7 for each link you create.
- Lotus 1-2-3:
    1. Open the **Edit** menu.
    2. Select **Links...**
    3. Select **Create...**
    4. Enter the following information in the appropriate fields:

|             |                     |
|-------------|---------------------|
| Application | <b>RDSWIN</b>       |
| Topic       | <b>filename.msl</b> |
| Item        | <b>blockname</b>    |
| Update Mode | <b>automatic</b>    |
  - Microsoft Word:
    1. Place the cursor where you want the DDE link to take effect.
    2. Press **Control + F9** to insert a blank field code.
    3. Type **DDEAUTO RDSWIN filename.msl blockname**.
    4. Press **F9** to update the field and display the data returned by the script.
    5. If the field definition remains displayed, instead of the script data, press **Shift + F9** or right-click the field definition and select **Toggle Field Codes**.

## ***DocumentDirect and DocuAnalyzer***

---

### **Introduction**

In conjunction with DocuAnalyzer, DocumentDirect provides advanced, automated report analysis. Analyses can be performed on a one-time basis or can be built into sophisticated processes that incorporate data from multiple reports or multiple versions of the same report.

This section explains how to use DocumentDirect in the following circumstances:

- Performing a one-time analysis
- Performing advanced analysis
- Updating data for advanced analysis

### ***Performing One-time Analysis***

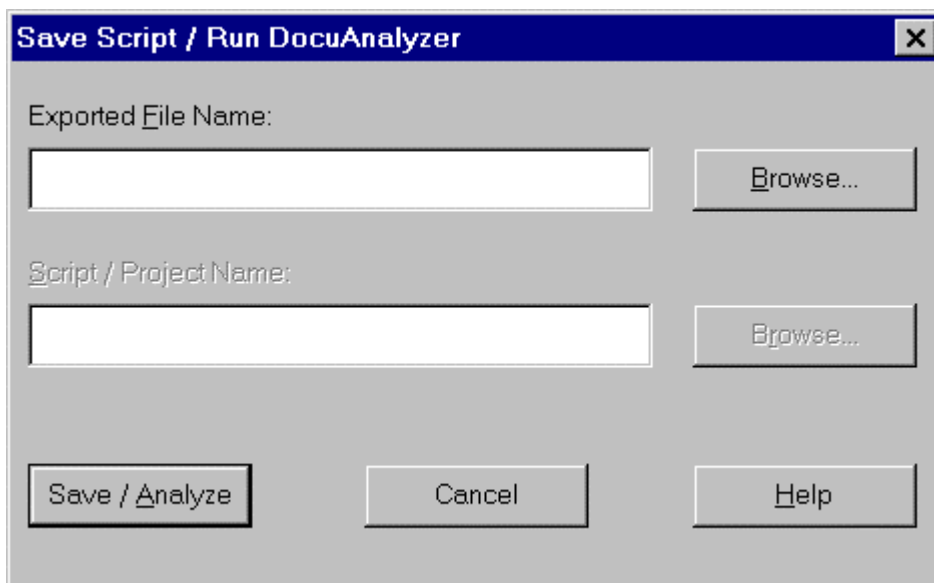
---

You can invoke DocuAnalyzer from DocumentDirect for one-time analysis. For information

on how to build a reusable reporting and analysis system, see "Performing Advanced Analysis."

To launch DocuAnalyzer for a one-time data analysis, complete the following steps:

1. Use DocumentDirect's exporting features to create a file containing the report information you want to analyze.
2. Select **Options|DocuAnalyzer**, or click the DocuAnalyzer toolbar button. The Save Script/Run DocuAnalyzer dialog is displayed, as shown in Figure 7-8.



*Figure 7-8. The Save Script/Run DocuAnalyzer Dialog*

**Note:** The Script/Project Name field is grayed for this procedure. For instructions on the use of this field, see "Performing Advanced Analysis."

3. Do one of the following:
  - If the analysis data was exported in the current DocumentDirect session, the **Exported File Name** field displays the name of the last file exported.
  - If the analysis data was exported in an earlier DocumentDirect session, enter the full path and name of the data file in the **Exported File Name** field. If you do not know the exact name or path, use the Browse button to locate the file.

After you select the file, click **OK**.

4. Click the **Save/Analyze** button. DocuAnalyzer starts with the exported report information loaded.

If DocuAnalyzer is already running with a data file open, it closes that data file and loads the new file. If the existing data file contains modifications, you are prompted to save the contents of the file.

**Note:** If you have not yet specified the location of DocuAnalyzer to

DocumentDirect, the Locate DocuAnalyzer dialog is displayed, as shown in Figure 7-9. Locate the DocuAnalyzer program and click **OK**. After you specify the path to DocuAnalyzer, this dialog does not appear again.

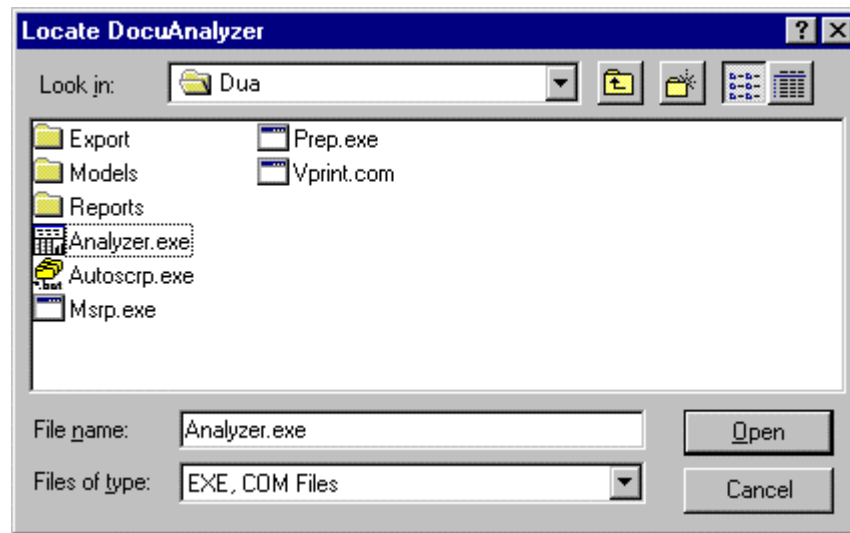


Figure 7-9. The Locate DocuAnalyzer Dialog

## Performing Advanced Analysis

DocumentDirect supports advanced analysis by DocuAnalyzer that lets you export data from multiple reports or multiple versions of the same report, and incorporate that data into DocuAnalyzer projects. This is useful for complex analyses or for analyses that are repeated on a regular basis.

Advanced analysis requires the following:

1. Creating a DocumentDirect script that locates and exports the data you need to analyze.
2. Invoking DocuAnalyzer.
3. Associating the DocumentDirect script with a DocuAnalyzer project.

For example, if a new version of a report is generated monthly, data in the new version can be added to data already resident in a DocuAnalyzer project for cumulative analysis.

**Note:** For a complete description of DocuAnalyzer projects, see the DocuAnalyzer documentation.

To perform advanced analysis, complete the following steps:

1. Select **Script|Start Recording** or click the script record button. If script recording is already enabled, select **Script|Clear** to clear existing script commands from memory.
2. Open the report containing the data to be analyzed.



3. Export the data to be analyzed. You may export as much data as you need from different parts of a single report version, from different versions of the same report, or from entirely different reports. Use the Append to File export feature to incorporate all the exported data into a single file for analysis.
4. Select **Options|DocuAnalyzer**, or click the DocuAnalyzer toolbar button. The Save Script / Run DocuAnalyzer dialog appears, as shown in Figure 7-8. The **Exported File Name** field is pre-filled with the name of the last file exported.
5. In the **Script/Project Name** field, enter the full path and name of the script/project file with which you wish to associate this data. If you do not know the exact name or path, use the Browse button to locate the file.

**Notes:**

- The filename must have the extension .MSL, as this name is also used for saving your recorded script. If you omit an extension, .MSL is appended automatically.
  - If you do not provide a path, DocumentDirect searches the working directory, specified in the **Script|Settings** dialog, for the script file.
  - A project file is created with the same name of your script and in the same directory. However, it has a .PRJ extension. If a project file of that name already exists, it is opened.
6. Click **Save/Analyze**. DocuAnalyzer starts with the selected file loaded within the project you specified. At the same time, your script commands are saved in the script file you specified in step 5.

If DocuAnalyzer is already running with an open data file and/or project file, they are closed and the new project and data file are opened. If the existing data file contains modifications, you are prompted to save the contents of the file.

**Note:** If you did not yet specify the location of DocuAnalyzer to DocumentDirect, the Locate DocuAnalyzer dialog is displayed, as shown in Figure 7-9. Locate the DocuAnalyzer program and click **OK**. After you specify the path to DocuAnalyzer, this dialog does not appear again.

### ***Updating Data for Advanced Analysis***

---

To update data in a DocuAnalyzer project created using the Advanced Analysis procedure, follow these steps:

1. Select **Script|Playback** from the DocumentDirect menu. The Playback Script File dialog appears.
2. Enter the name of the script associated with the DocuAnalyzer project you want to update. If you do not know the exact name or path, use the Browse button to locate the script file.
3. Press **OK**. The data is exported, and the DocuAnalyzer project associated with the data is opened.

**Notes:**

- If you want your update to always pick the latest version of the specified report, use any text editor to edit the associated script file, replacing the version shown in the OPENVIEW script command with all blanks (do not delete the quotation marks). This instructs DocumentDirect to export the latest version of the report whenever the script is used to refresh the report data.
- If DocuAnalyzer is already running, any open projects are closed.
- You can also initiate an update from within DocuAnalyzer. Refer to the DocuAnalyzer Documentation for more information.

***Edit Menu Functions***

The **Edit** menu contains options that extract data. These menu options allow you to locate and mark the contents of reports, even if the format of the reports changes from version to version. The **Edit** menu text marking features make it simple to select exactly the data you want to export to other applications. These features are briefly described below.



Figure 7-10. The Edit Menu

**Note:** Other **Edit** menu options are discussed fully in Chapter 3.

| Command | Description                                                                                                                                     |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Unmark  | Clear any existing marks in the displayed report. Unmark has no effect on other view customization, such as frozen, hidden, or rearranged text. |

| Command                                               | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Copy to Clipboard                                     | Copy selected text to the Windows Clipboard for insertion into other Windows applications. Copy to Clipboard provides a simple, direct way to export text report data to other applications.                                                                                                                                                                                                                                                                                                                                                              |
| Undo Mark                                             | Reverse the last action taken. DocumentDirect always keeps track of commands, so Undo can usually reverse them. You can back out of a series of actions without affecting actions that came before. Undo always displays the last action performed, so you can be sure of what it is about to undo. If you use Undo in the course of recording a script, the script ignores the undone command completely.<br><br>Note that Undo cannot reverse the following commands: Print, Export, Close, Copy to Clipboard, Exit, Run.                               |
| Set Origin                                            | Establish your location when you are working with reports that change in size or format. Set Origin makes the current caret location the position from which following actions are measured.                                                                                                                                                                                                                                                                                                                                                              |
| Reset Origin                                          | Return the caret to the top left-hand corner of the page and set the origin there. Reset Origin is the quickest way to be sure your caret position is the top left corner of a page.                                                                                                                                                                                                                                                                                                                                                                      |
| Drop Anchor/<br>Mark Anchor to Caret/<br>Raise Anchor | These options work together to help you mark text in reports where the format may vary from version to version. <ul style="list-style-type: none"> <li>• Drop Anchor: Begin marking text at the point where the anchor is dropped.</li> <li>• Mark Anchor to Caret: Mark all the text between the anchor and the current caret position.</li> <li>• Raise Anchor: Remove the anchor once text is marked. Raising the anchor does not remove marks already created. You can also raise a dropped anchor by dropping anchor at another location.</li> </ul> |
| Add/Edit Attributes                                   | Open the Add/Edit Attributes dialogs, with which you can define the characteristics of exported data.<br><br><b>Notes:</b> <ol style="list-style-type: none"> <li>1) Text must be marked for Add Attributes to work.</li> <li>2) Attributes must already be assigned for Edit Attributes to work.</li> </ol> <p>The attributes that can be added to marked text are listed in the table following Figure 7-11.</p>                                                                                                                                        |

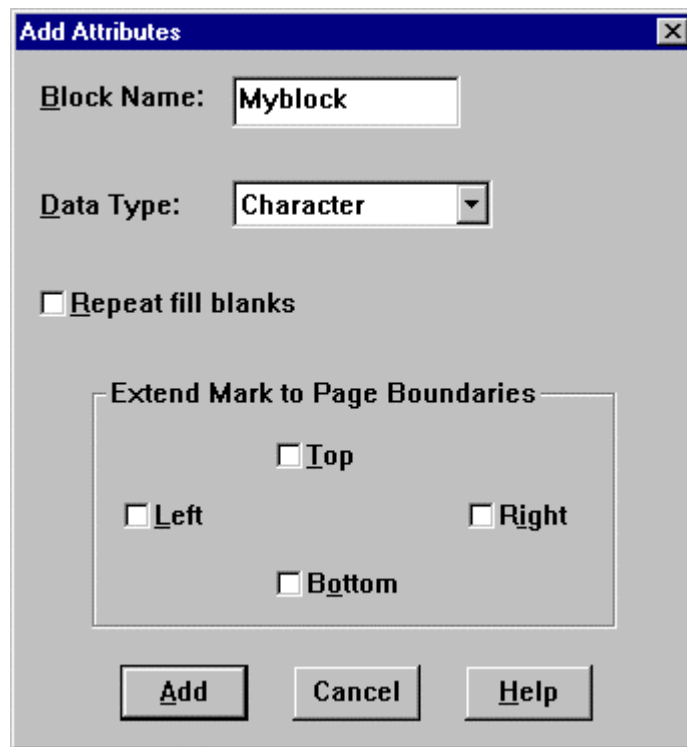


Figure 7-11. The Add Attributes Dialog

| Command            | Description                                                                                                                                                                                                                                                                                                                                                      |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Block Name         | Assign a name to the current mark. The name must be different than all other current block names.                                                                                                                                                                                                                                                                |
| Data Type          | Define how the data is treated when it is exported in CSV, SYLK, or XML format. Two options are available: <ul style="list-style-type: none"><li>• Character: All marked text exports, including punctuation and underlining.</li><li>• Number: Only numbers export. Numbers with decimals retain the decimals, but omit other non-numeric characters.</li></ul> |
| Repeat fill blanks | Any blank lines within the block are filled by the data in the previous line. This may be useful for repeating page numbers or line labels, or for marking a key field to appear with every line of data. This option is not available for DDE links.                                                                                                            |

| Command                        | Description                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extend Mark to Page Boundaries | Extend a mark to the page boundaries. This option allows you to assign attributes to text that may not be displayed in the current view.<br><b>Top</b> extends the mark to the top of the page.<br><b>Left</b> extends the mark to the left edge of the page.<br><b>Right</b> extends the mark to the right edge of the page.<br><b>Bottom</b> extends the mark to the bottom of the page. |
| Add                            | Add the selected attributes.                                                                                                                                                                                                                                                                                                                                                               |

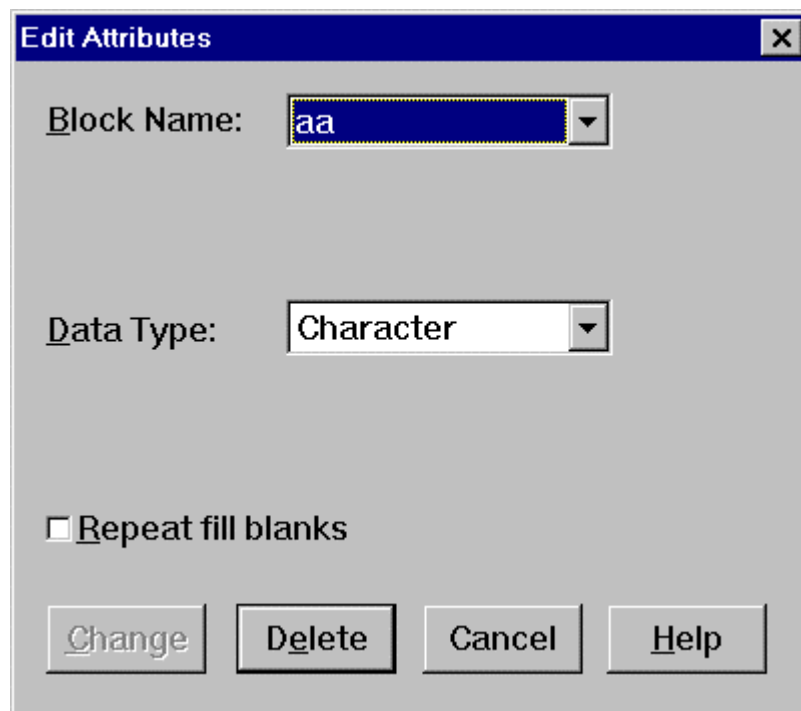


Figure 7-12. The Edit Attributes Dialog

| Command    | Description                                              |
|------------|----------------------------------------------------------|
| Block Name | Select the mark for which you want to change attributes. |

| Command            | Descripti on                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Data Type          | Define how the data is treated when it is exported in CSV, SYLK, or XML format. Two options are available: <ul style="list-style-type: none"><li>• Character: All marked text exports, including punctuation and underlining.</li><li>• Number: Only numbers export. Numbers with decimals retain the decimals, but omit other non-numeric characters.</li></ul> |
| Repeat fill blanks | Any blank lines within the block are filled by the data in the previous line. This may be useful for repeating page numbers or line labels, or for marking a key field to appear with every line of data. This command is not available for DDE links.                                                                                                           |
| Change             | Change the selected attributes.                                                                                                                                                                                                                                                                                                                                  |
| Delete             | Delete the selected block.                                                                                                                                                                                                                                                                                                                                       |

### Example of Add Attributes Menu Option

Figure 7-13 illustrates use of the Add Attribute option. The screens show the following:

- A report from which the San Francisco office sales figures are taken. We need "San Francisco" as a line label, and the figures must include decimal places.
- The output produced by the attributes we assigned.

**Add Attributes Illustration**

DocumentDirect - [C:\MOBIUS\DDR\SALES\SL001.RPT]

01/13/93

REPORT ID: SL001      SALES REVENUE

DEPARTMENT: SALE      SALES

REGION: WE      WESTERN

OFFICE: SF      SAN FRANCISCO, CALIFORNIA

| PRODUCT              | PLANNED<br>MTD | ACTUAL<br>MTD | VAF |
|----------------------|----------------|---------------|-----|
| PNEUMATIC DRILL      | 175.49         | 312.83        |     |
| AIR HAMMER           | 1,709.36       | 3,047.12      | 1,  |
| 15 HP AIR COMPRESSOR | 1,249.36       | 2,227.12      |     |
| 25 HP AIR COMPRESSOR | 124.89         | 222.63        |     |
| DELUXE GRINDER       | 2,015.49       | 3,592.83      | 1,  |
| STANDARD GRINDER     | 2,271.02       | 4,048.34      | 1,  |
| PUNCH PRESS          | 55.89          | 99.63         |     |
| 1/2" SHEAR           | 1,244.99       | 2,219.33      |     |
| 1/4" SHEAR           | 149.96         | 267.32        |     |
| 3/8" DRILL PRESS     | 2,015.49       | 3,592.83      | 1,  |
| 1/2" DRILL PRESS     | 2,015.49       | 3,592.83      | 1,  |
| 100 AMP ARC WELDER   | 100.28         | 178.76        |     |
| 180 AMP ARC WELDER   | 2,271.02       | 4,048.34      | 1,  |
| 12" BAND SAW         | 1,505.81       | 2,684.27      | 1,  |
| 18" BAND SAW         | 124.89         | 222.63        |     |

**Step 1**

"San Francisco" is assigned  
**Character** and **Repeat Fill**  
**Blanks** attributes.

Numbers are assigned  
**Number** attribute.

Microsoft Excel - FIG31.CSV

|    | A             | B                    | C       | D       | E       |
|----|---------------|----------------------|---------|---------|---------|
| 1  | SAN FRANCISCO | PNEUMATIC DRILL      | 175.49  | 312.83  | 137.34  |
| 2  | SAN FRANCISCO | AIR HAMMER           | 1709.36 | 3047.12 | 1337.76 |
| 3  | SAN FRANCISCO | 15 HP AIR COMPRESSOR | 1249.36 | 2227.12 | 977.76  |
| 4  | SAN FRANCISCO | 25 HP AIR COMPRESSOR | 124.89  | 222.63  | 97.74   |
| 5  | SAN FRANCISCO | DELUXE GRINDER       | 2015.49 | 3592.83 | 1577.34 |
| 6  | SAN FRANCISCO | STANDARD GRINDER     | 2271.02 | 4048.34 | 1777.32 |
| 7  | SAN FRANCISCO | PUNCH PRESS          | 55.89   | 99.63   | 43.74   |
| 8  | SAN FRANCISCO | 1/2" SHEAR           | 1244.99 | 2219.33 | 974.34  |
| 9  | SAN FRANCISCO | 1/4" SHEAR           | 149.96  | 267.32  | 117.36  |
| 10 | SAN FRANCISCO | 3/8" DRILL PRESS     | 2015.49 | 3592.83 | 1577.34 |
| 11 | SAN FRANCISCO | 1/2" DRILL PRESS     | 2015.49 | 3592.83 | 1577.34 |
| 12 | SAN FRANCISCO | 100 AMP ARC WELDER   | 100.28  | 178.76  | 78.48   |
| 13 | SAN FRANCISCO | 180 AMP ARC WELDER   | 2271.02 | 4048.34 | 1777.32 |
| 14 | SAN FRANCISCO | 12" BAND SAW         | 1505.81 | 2684.27 | 1178.46 |
| 15 | SAN FRANCISCO | 18" BAND SAW         | 124.89  | 222.63  | 97.74   |

**Step 2**

Spreadsheet shows the  
repeated line labels and  
decimal number output.

*Figure 7-13. Added Attributes – Effect in a Spreadsheet*





## *File Menu Functions*

DocumentDirect includes the Export option on the File menu. This option makes it possible to format exported data in ASCII (American Standard Code for Information Interchange, also known as "plain text"), CSV (Comma-Separated Variables), SYLK (Symbolic Link), and XML (Extensible Markup Language). The Export function also enables links between mainframe-resident reports and client software supporting Dynamic Data Exchange (DDE).

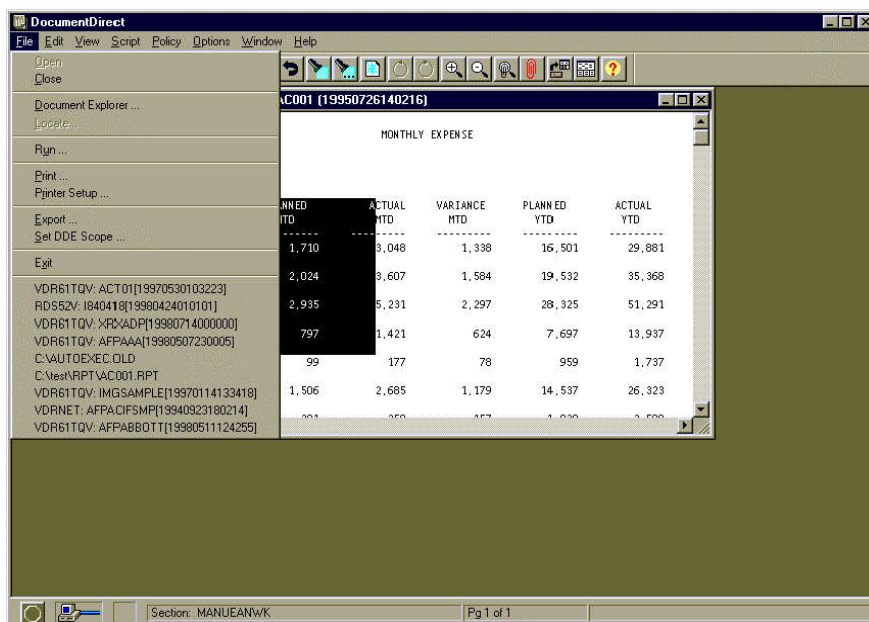


Figure 7-14. The File Menu

**Note:** Other File menu functions are discussed in Chapter 4.

| Command | Description                                                                                                                                                                                                                                                                                            |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Run     | <p>Start another application. Run incorporates other applications into DocumentDirect scripts and exporting procedures.</p> <p>Run starts the desired application and switches to it, ending your access to DocumentDirect commands. When you use Run in a script, be sure it is the last command.</p> |



| Command          | Description                                                                                                                                                                                                                                                                                                                                    |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Export           | Move data into a file accessible to other applications. Export offers options for tailoring that information to your needs. You can define exported data as Comma-Separated Variable (CSV), Symbolic Link (SYLK), Extensible Markup Language (XML), or ASCII text. Selecting Export displays the Export To File dialog as shown in Figure 7-2. |
| Set DDE Scope... | Set the range of pages addressed by a DDE link.<br><br>It is available only when the Script Record function is ON.                                                                                                                                                                                                                             |









### ***Policy Menu Functions***

---

The Policy menu contains the following options for loading, creating, editing, and working with policies.



| Button                                                                              | Name on Menu | Description                                                                                                       |
|-------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------|
|  | Load         | Displays the Load Policy dialog. Located on the DocumentDirect toolbar.                                           |
|  | Edit/Create  | Edits the current policy or, if no policy is loaded, creates a new policy. Located on the DocumentDirect toolbar. |

| Button                                                                              | Name on Menu        | Description                                                                                  |
|-------------------------------------------------------------------------------------|---------------------|----------------------------------------------------------------------------------------------|
| N/A                                                                                 | Save                | Saves the current policy.                                                                    |
| N/A                                                                                 | Save As             | Displays the Save As dialog.                                                                 |
| N/A                                                                                 | Unload              | Unloads the current policy.                                                                  |
|    | Edit Field          | Displays the Field Settings dialog for the highlighted field. Located on the Policy toolbar. |
|    | Add Field           | Adds a field and displays the Field Settings dialog. Located on the Policy toolbar.          |
|    | Edit Group          | Displays the Group Settings dialog for the highlighted group.                                |
|    | Add Group           | Displays the Group Settings dialog for a new group.                                          |
|    | Metadata Window     | Shows or hides the Metadata Window. Located on the Policy toolbar.                           |
|    | Field Window        | Show or hide the Field Window. Located on the Policy toolbar.                                |
|   | Group Window        | Shows or hides the Group Window. Located on the Policy toolbar.                              |
|  | Sample Window       | Shows or hides the Sample Window. Located on the Policy toolbar.                             |
| N/A                                                                                 | Show Logical Fields | Shows or hides logical fields on an LPFD report.                                             |

---

## Appendix A. Installation

---

### Introduction

This appendix describes how to install DocumentDirect software. It explains:

- How to install DocumentDirect for the first time.
- How to customize a DocumentDirect installation.

- How to re-install DocumentDirect when you receive upgrades.
- How to perform a full install of DocumentDirect from a network drive.
- How to perform a minimal install of DocumentDirect from a network drive.
- How to uninstall DocumentDirect.

For either an initial installation or a re-installation, be sure to review Chapter A1. Overview of Installation.

## Contents

### Appendix A. Installation

#### Chapter A1. Overview of Installation

- Sample Files
- System Requirements
- Product Compatibility
- Software Installation

#### Chapter A2. Initial Installation

- Step 1 – Run the Installation Program
- Step 2 – Customize Your System

#### Chapter A3. Custom Installation

- Step 1 – Run the Installation Program
  - Installation Dependencies
  - Installation Command Line Parameters
- Step 2 – Customize Your System

#### Chapter A4. Upgrade an Existing Installation

- Step R1 – Re-install DocumentDirect
- Step R2 - Determine if any Conversion is Required
  - Converting from Version 1.4
  - Converting from Version 1.3 or Earlier, or  
INFOPAC-RDS for Windows 298
- Step R3 – Customize Your System

#### Chapter A5. Full Install from a Network Drive

- Step 1 – Prepare the Installation Files
- Step 2 – Install Using the Prepared Files

#### Chapter A6. Minimal Install from a Network Drive

Step 1 – Install on a Network Drive

Step 2 – Copy System Files to Each Workstation

Step 3 – Create Program Shortcuts

Chapter A7. Uninstalling DocumentDirect

Remaining Files

Remaining Registry Keys

## Chapter A1. Overview of Installation

---

### Sample Files

The installation process installs sample data files into subdirectories of the DocumentDirect installation directory. You can use the sample data files, instead of your actual data, to familiarize yourself with DocumentDirect's features. Follow the instructions in Chapter 2 to view the sample documents. The following table lists sample files and their subdirectories.

| Type of File           | Subdirectory | Special Viewing Instructions                                  |
|------------------------|--------------|---------------------------------------------------------------|
| Report files           | REPORTS      | None.                                                         |
| Image documents        | IMAGES       | None.                                                         |
| Document Archive Files | DAFS         | The Archive File option must be enabled for your workstation. |
| Script files           | SCRIPTS      | See Chapter 5.                                                |

For a complete list of sample files, refer to README.TXT in the DocumentDirect installation directory.

### System Requirements

The following lists give the minimum requirements for operation of DocumentDirect with text documents and with LPFD or image documents, virtual memory requirements, and annotation storage requirements in the Mobius database. As with most Windows applications, performance is greatly improved for systems with faster processors and more RAM.

For text documents:

- Windows 95, Windows 98, or Windows NT 4.0.
- Intel Pentium or compatible 100MHz processor (Pentium II recommended).
- 16MB RAM (32MB recommended).
- 60MB of free disk space for installation.

For LPFD or image documents:

- Windows 95, Windows 98, or Windows NT 4.0.
- Intel Pentium or compatible 100MHz processor (Pentium II 266MHz recommended).
- 16MB RAM (64MB RAM recommended).
- 60MB of free disk space for installation.
- Additional free disk space for caching LPFD resources. Since LPFD resources can be cached to improve performance, the amount of required free disk space varies based on your specific resources.

Virtual memory requirements:

- Based on your operating system, use one of the following recommendations, where R stands for the amount of RAM on your system:
  - ◆ Windows 95 or Windows 98 – let Windows manage your virtual memory, which is the default.
  - ◆ Windows NT – total paging file size for all drives should be  $R+12\text{MB}$ , *with a minimum size of 40MB*.

Annotation storage requirements in the Mobius database:

- Each annotation requires approximately 350 bytes of storage in addition to the actual size of the annotation.
- Each annotated page requires approximately 360 bytes of storage.

## Product Compatibility

DocumentDirect 2.2 is compatible with the following document servers:

- ViewDirect for MVS 6.1 or later
- ViewDirect for Networks 3.2
- INFOPAC-RDS for MVS 5.2

For more information about the document servers, refer to their respective user's guides.

DocumentDirect 2.2 is compatible with the following versions of DocuAnalyzer:

- DocuAnalyzer 2.1
- DocuAnalyzer 4.1

## Software Installation

Depending on the type of installation you are doing, continue by reading one of the following chapters:

- Chapter A2. Initial Installation
- Chapter A3. Custom Installation
- Chapter A4. Upgrade an Existing Installation
- Chapter A5. Full Install from a Network Drive
- Chapter A6. Minimal Install from a Network Drive

## Chapter A2. Initial Installation

---

Before proceeding with this installation, be sure to review system requirements as described in Chapter A1. Overview of Installation.

The initial installation of DocumentDirect is a simple process consisting of the following steps:

Step 1 – Run the Installation Program

Step 2 – Customize Your System

Step 1 is required. Step 2 is optional.

The following sections discuss these steps in detail.

### ***Step 1 – Run the Installation Program***

---

**Note:** If you wish to customize your installation of DocumentDirect (install only selected components), see the instructions in Chapter A3. Custom Installation.

To complete a full installation of DocumentDirect, perform the following tasks:

1. Start Windows. If it is already started, exit all Windows programs.
2. Insert the DocumentDirect installation media in an appropriate drive. The installation program may start automatically. If it does, continue with task 4.
3. From the Start menu, select **Run** or **Programs|MS-DOS Prompt**. In the Run dialog or at the MS-DOS prompt, type *driveletter*:\\SETUP, where *driveletter* is the letter assigned to the drive that contains your installation media. Click **OK**.
4. Follow the instructions in the dialogs. When the Select Setup Type dialog appears, select **Typical (Full)** to choose a full installation.
5. Click **Next** and continue to follow the instructions in the dialogs until the installation is complete.

If the operating system is Windows 95 and DCOM95 is not installed, the installation program installs DCOM95 and requires a reboot immediately afterwards. The installation program restarts itself after Windows restarts. This is necessary because DCOM95 must be fully installed before the data access components can be installed.



## ***Step 2 – Customize Your System***

---

DocumentDirect allows you to customize a wide range of options related to displaying and working with documents. For information on customizing the user interface, see Chapter C1. Configuring DocumentDirect.

## Chapter A3. Custom Installation

---

A custom installation allows you to install only the components of DocumentDirect that you need. You have several methods available to customize your installation:

- Before installation begins, you can use parameters with the SETUP command to pre-determine which DocumentDirect components should install automatically.
- You can select a custom installation from dialogs that appear during the installation process.
- You can specify components before installation but force a dialog to appear during the installation process that allows you to change your selections.

Before proceeding with this installation, be sure to review system requirements as described in Chapter A1. Overview of Installation.

To perform a custom installation of DocumentDirect, complete the following steps:

Step 1 – Run the Installation Program

Step 2 – Customize Your System

Step 1 is required. Step 2 is optional.

### ***Step 1 – Run the Installation Program***

---

To do a custom installation of DocumentDirect, perform the following tasks:

1. Start Windows. If it is already started, exit all Windows programs.
2. Insert the DocumentDirect installation media in an appropriate drive. The installation program may start automatically. If the installation begins automatically and you want to use command line parameters to force installation of specified components, exit the installation setup application and continue with task 3. Otherwise, continue with task 4.
3. From the Start menu, select **Run** or **Programs|MS-DOS Prompt**. In the Run dialog or at the MS-DOS prompt, type *driveletter*:\SETUP, where *driveletter* is the letter assigned to the drive that contains your installation media. Follow the SETUP command with any installation parameters you wish to specify to control installation defaults. For information about command line parameters, see "Installation Command Line Parameters."
4. Click **OK** in the Run dialog or press Enter in the MS-DOS dialog to begin the installation.
5. Follow the instructions in the installation dialogs. If the Select Setup Type dialog does not appear during the installation, continue with task 9. If the dialog appears, select **Custom** to choose a custom install.

6. Click **Next**. The Select Components dialog is displayed.
7. In the Select Components dialog, select the components you wish to install. For information about installation dependencies, refer to "Installation Dependencies." To change the language options, select **Non-English Languages**. Then click **Change...** to open the Select Sub-components dialog and change the selected language options.
8. When you finish selecting the components you want to install, click **Next**.
9. Follow the instructions in the dialogs until installation is complete.

## Installation Dependencies

Certain DocumentDirect programs are dependent on the installation of other DocumentDirect components. The following programs install only if their prerequisite components are installed:

| Programs                                                          | Prerequisite Components                                                                                                                                       |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Annotation Manager (and associated icon)                          | Annotation                                                                                                                                                    |
| Database Setup and Database Conversion (and associated shortcuts) | One or more of the following: <ul style="list-style-type: none"><li>• Annotation</li><li>• Network Server Access</li><li>• Standalone Server Access</li></ul> |

If the Database Setup program was installed, when you reach the last dialog of the installation program, you will see the "I want to run the Mobius Database Setup wizard now" checkbox option. You must run the Database Setup program when instructed to by your ViewDirect administrator or if you want to use annotations. Your ViewDirect administrator will provide the name of the ODBC data source for you to select during the Database Setup process.

## Installation Command Line Parameters

Installation parameters allow you to pre-select certain installation features before running the installation program. The specified features would otherwise be selected in dialogs during the installation process. You can specify multiple parameters at once, but they must be separated by a space.

The parameters you can use with the SETUP command at installation are described in the table below. These installation parameters and their respective options are explained in subsequent sections.

**Note:** Installation parameters and their options are not case-sensitive.

| Parameter | Description |
|-----------|-------------|
|-----------|-------------|

| Parameter | Description                                                                                                                                                                                                                                                                                             |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| /:D       | Specifies the default installation directory for DocumentDirect. By default, when this parameter is used, the Choose Destination Location dialog does not appear during the installation process.                                                                                                       |
| /:F       | Installs only the specified DocumentDirect components. By default, when this parameter is used, the Select Components dialog does not appear during the installation process. Also, the Select Setup Type dialog <i>never</i> appears during the installation process when this parameter is specified. |
| /:L       | Installs the specified non-English language components in addition to the English language component, which is installed by default.                                                                                                                                                                    |
| /:M       | Excludes DCOM components and MDAC from the DocumentDirect installation process. This parameter is not recommended for a standard installation procedure.                                                                                                                                                |
| /:Q       | Allows uninterrupted installation except for reboot and uninstall dialogs.                                                                                                                                                                                                                              |
| /:R       | Suppresses the reboot dialog at the end of the setup process.                                                                                                                                                                                                                                           |
| /:S       | Installs or updates only the system DLL files necessary to run DocumentDirect. When you use this option, all other command line parameters are ignored.                                                                                                                                                 |
| /:U       | Uninstalls older DocumentDirect versions in the target directory without user interaction.                                                                                                                                                                                                              |

### Selecting the Installation Directory

Use the /:D directory parameter to specify the installation directory for DocumentDirect. Specify the /:D parameter with the SETUP command as follows:

```
driveletter:\SETUP /:Ddirectoryname
```

where:

- *driveletter* is the letter assigned to the drive that contains your installation media.
- *directoryname* is the name of the directory in which you want to install DocumentDirect. Note that there is no space between the /:D parameter and the *directoryname* option. If the directory name contains spaces, enclose it in quotation marks, as in the example below:

```
E:\SETUP /:D"C:\Program Files\Mobius\DDR\"
```

When the /D parameter is specified with the SETUP command, by default, the Choose Destination Location dialog does not appear during the installation process. To force the dialog to appear and allow the user the option to change the default directory, use the ! parameter option. The ! option must immediately follow the /D: parameter, as shown in the example below:

```
E:\SETUP /D!C:\Mobius\DDR
```

## Selecting which Components to Install

Use the /F feature parameter to indicate which DocumentDirect components (features) you want to install automatically. Specify the /F parameter with the SETUP command as follows:

```
driveletter:\SETUP /Foptionslist
```

where:

- *driveletter* is the letter assigned to the drive that contains your installation media.
- *optionslist* is a list of characters that represent specific DocumentDirect components you want to install automatically.

The list of components you can choose to install automatically is shown in the table below. This list of components does not include language components, which you can choose from the Select Components dialog or install automatically with the /L: language parameter.

| Component                | Character |
|--------------------------|-----------|
| AFP                      | A         |
| Annotation               | T         |
| DJDE/Metacode            | D         |
| HPTS Image               | H         |
| Image                    | I         |
| MVS Server Access        | M         |
| Network Server Access    | N         |
| PCL                      | C         |
| PDF/PS                   | P         |
| Samples                  | S         |
| Standalone Server Access | L         |
| ViewDirect API Access    | V         |

The example below installs only the DJDE/Metacode, HPTS Image, PCL, MVS Server Access, Image, and PDF/PS Support components from installation media on the E: drive.

```
E:\SETUP /:Fdhcmip
```

| Parameter | Description                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| /:F!      | Force the Select Components dialog to appear, allowing the user the option to change the components to be installed or to select specific language components. The ! option must immediately follow the /:F parameter, as shown in the example below. Alternatively, you can use the /:L parameter with the /:F parameter to specify which language components you want to install automatically. |
| /:L       | Specify which language components you want to install. For details of the /:L parameter, refer to "Selecting which Languages to Install."                                                                                                                                                                                                                                                         |

**Note:** When you use the /:F parameter with the SETUP command, the Select Setup Type dialog never appears during the installation process, regardless of whether you use the ! option.

The following example selects only the Annotation, Network Server Access, AFP, and DJDE/Metacode components to install from installation media on the E: drive. It also forces the Select Components dialog to appear, so the user has the option to change these selections during installation.

```
E:\SETUP /:F!tnad
```

### *Selecting which Languages to Install*

DocumentDirect's English language component is always installed by default. Use the /:L language parameter to indicate which additional language components you want to install automatically. Specify the /:L parameter with the SETUP command as follows:

```
driveletter:\SETUP /:Llanguageident1 [/:Llanguageident2 ...]
```

or

```
driveletter:\SETUP /:L0
```

where:

- *driveletter* is the letter assigned to the drive that contains your installation media.
- *languageident* is a 3-letter identifier that represents DocumentDirect non-English language components you want to install automatically.

- 0 indicates that no additional languages are to be installed.

The list of additional language components you can choose to install automatically is shown in the table below:

| Language              | Identifier |
|-----------------------|------------|
| Chinese (Simplified)  | CHS        |
| Chinese (Traditional) | CHT        |
| Danish                | DAN        |
| French (Canadian)     | FRC        |
| French (Standard)     | FRA        |
| German                | DEU        |
| Italian               | ITA        |
| Japanese              | JPN        |
| Korean                | KOR        |
| Portuguese            | PTB        |
| Spanish               | ESN        |
| Swedish               | SVE        |

Use one `/:L` parameter for each additional language component you wish to install. For example, the following command installs the German, Swedish, and French (Standard) language components (in addition to the default English component) from installation media in the E: drive:

```
E:\SETUP /:Ldeu /:Lsve /:Lfra
```

| Parameter         | Action                                                                                                                                                                                                                                                                                               |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <code>/:L0</code> | Overrides any other <code>/:L</code> parameter options specified. No other languages are installed besides English, regardless of what else is specified. If you use the <code>/:L0</code> parameter with another <code>/:L</code> language parameter, a warning dialog appears during installation. |
| <code>/:S</code>  | Overrides <i>all</i> <code>/:F</code> and <code>/:L</code> parameters specified in the same command.                                                                                                                                                                                                 |

When one or more `/:L` parameters are specified with the `SETUP` command, by default, the Select Components dialog does not appear during the installation process. To force the Select Components dialog to appear and allow the user the option to change the components

to be installed, you must use the `/:F!` parameter to specify at least one other component to be installed. For more information on using the `/:F!` parameter, refer to "Selecting which Components to Install."

**Note:** When you use the `/:L` parameter with the `SETUP` command, the Select Setup Type dialog never appears during the installation process, regardless of whether you use the `/:F!` parameter and option.

## *Excluding DCOM and MDAC*

Use the `/:M` parameter to exclude DCOM and MDAC verification and installation. This parameter minimizes the number of reboots required during the installation process. Specify the `/:M` parameter with the `SETUP` command as follows:

```
driveletter:\SETUP /:M
```

where *driveletter* is the letter assigned to the drive that contains your installation media.

**Note:** DocumentDirect may run with reduced features if DCOM and MDAC are not installed.

## *Allowing Uninterrupted Installation Except for Reboot and Uninstall Dialogs*

Use the `/:Q` parameter to suppress all user interaction dialogs except for reboot and uninstall. The `/:Q:` parameter supersedes all parameters that force a dialog to appear. Use this parameter with the `/:M`, `/:R` and `/:U` parameters to install without the need for any user interaction. Specify the `/:Q:` parameter with the `SETUP` command as follows:

```
driveletter:\SETUP /Q:
```

where *driveletter* is the letter assigned to the drive that contains your installation media.

## *Suppressing the Reboot Dialog*

Use the `/:R:` parameter to suppress the reboot dialog when the setup process detects shared DLL files. Be sure to reboot before using DocumentDirect when you use this parameter. Specify the `/:R:` parameter with the `SETUP` command as follows:

```
driveletter:\SETUP /R:
```

where *driveletter* is the letter assigned to the drive that contains your installation media.

## *Installing Only System DLL files*

Use the `/:S` system DLL parameter to install only the system DLLs necessary to run DocumentDirect. If the appropriate DLLs already exist on your system, the install process updates them if necessary. The `/:S` parameter is useful if you want to run DocumentDirect from external media without installing it locally. Specify the `/:S` parameter with the `SETUP` command as follows:

```
driveletter:\SETUP /:S
```

where *driveletter* is the letter assigned to the drive that contains your installation media.



**Note:** The `/:S` parameter overrides all other parameters. When the `/:S` parameter is specified, all other installation parameters are ignored.

If a DLL that must be updated is in use at the time the `SETUP` command is executed, you may need to reboot your system. An indicator message appears if a reboot is necessary.

## *Uninstalling Older Versions Automatically*

Use the `/U:` parameter to automatically uninstall older DocumentDirect versions in the target directory without confirmation and results dialogs. Specify the `/U:` parameter with the `SETUP` command as follows:

```
driveletter:\SETUP /:U
```

where *driveletter* is the letter assigned to the drive that contains your installation media.

## *Using Multiple Installation Parameters*

You can use any number of the parameters discussed in this chapter with the `SETUP` command. You can also use the installation parameters in any order.

The following command installs the Annotation, DJDE/Metacode, PCL, MVS Server Access, Spanish language, and Japanese language components of DocumentDirect, in addition to the default English language component. The components are installed in the `C:\Program Files\Mobius\DDR\` directory from installation media in the E: drive.

```
E:\SETUP /:D"C:\Program Files\Mobius\DDR\" /:Lesn /:Ljpn /:Ftdcm
```

The following command installs only the DLLs necessary to run DocumentDirect:

```
E:\SETUP /:S
```

The command below also installs only the DLLs necessary to run DocumentDirect, since it contains the `/:S` parameter, which overrides the `/:F` and `/:L` parameters:

```
E:\SETUP /:Ftdcm /:L0 /:S /:D"C:\Program Files\Mobius\DDR\"
```

## ***Step 2 – Customize Your System***

---

If you want to change DocumentDirect's default configuration, perform Step 2 in Chapter A2. Initial Installation.

## Chapter A4. Upgrade an Existing Installation

---

DocumentDirect new release and upgrade media contain complete DocumentDirect systems. If you are currently running any version of DocumentDirect or INFOPAC-RDS for Windows, you need to execute the re-installation steps described in this chapter. These steps are:

Step R1 – Re-install DocumentDirect

Step R3 – Customize Your System

Step R1 is required. Step R2 is optional.

The following sections discuss these steps in detail.

### ***Step R1 – Re-install DocumentDirect***

---

Complete the installation steps in Chapter A2. Initial Installation. Do not customize DocumentDirect until you complete the re-installation steps.

### ***Step R2 - Determine if any Conversion is Required***

---

If you are already running DocumentDirect 2.2 or 2.1, re-installation does not require any conversion and you are done. If you are running a version of DocumentDirect prior to 2.1 or any version of INFOPAC-RDS for Windows, conversion *is* required. The following sections explain the conversion requirements based on the version of DocumentDirect or INFOPAC-RDS for Windows that you are currently running. You should also review the Release Notes for information on the changes and enhancements to DocumentDirect.

#### **Converting from Version 1.4**

If your current version is DocumentDirect 1.4, your document servers were configured to use 16-bit communications protocols. For Windows 95, Windows 98, or Windows NT, configure each of your document servers to use 32-bit communications protocols. For example, if you had a document server using the 16-bit WINSOCK.DLL, you must configure it to use the 32-bit WSOCK32.DLL. Then configure your document servers as described in Chapter C1, "Managing Document Servers."

#### *Script Changes*

The OPENVIEW script command replaces the ATTACH and OPEN script commands. DocumentDirect still supports the ATTACH and OPEN script commands, so existing scripts do not need to be changed. However, to record new scripts, use the OPENVIEW script command.

Recipient IDs and passwords are no longer stored in the script file. OPENVIEW obtains them from the document server configuration, thereby letting users share a single script file to open reports from a common document server. OPENVIEW also opens multiple reports on a single document server so that users have to enter Recipient ID or password only once, even if the document server was configured to prompt each time a user attaches to the document server.

The version of a report that a DocumentDirect 1.4 script opens is specified by a Version ID in the script's OPEN command. In DocumentDirect 2.2, as part of providing year 2000 support, the Version ID must begin with a 4-digit year. To convert existing scripts to run in DocumentDirect 2.2, add the 2-digit century, for example, 19, to the beginning of the Version ID.

The following is an example of a DocumentDirect 1.4 script command that opens a file:

```
OPEN REPORTID 'IN001' VERSIONID '950727103123' SECTIONID 'MANUEANWK
0000000000000002'
```

In this example, the DocumentDirect 1.4 script used VERSIONID **950727103123**, which is changed below, to **19950727103123**:

```
OPEN REPORTID 'IN001' VERSIONID '19950727103123' SECTIONID 'MANUEANWK
0000000000000002'
```

## Converting from Version 1.3 or Earlier, or INFOPAC-RDS for Windows

If your current version is DocumentDirect 1.3 or earlier, or any version of INFOPAC-RDS for Windows, you must perform the following steps so that you can configure document servers using the dialogs on the DocumentDirect 2.2 **Options|Configure Document Servers** menu.

1. **Configure document servers using the communications parameters from your RDSWIN.INI file.**

When you configure document servers using the New Document Server dialog in DocumentDirect 2.2, you need to supply information that is in your RDSWIN.INI file. Use the information below in conjunction with the instructions in "Managing Document Servers," in Chapter C1.

| Protocol: TCPIP                                                                     |                                                                 |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Use the information from this line in the [TCPIP] section of the RDSWIN.INI file... | ...as the entry in this field of the New Document Server dialog |
| TCPIPServiceName                                                                    | Service Name                                                    |
| TCPIPTransactionName                                                                | Transaction Name                                                |
| TCPIPVendorDllPath                                                                  | Product DLL Path                                                |

| Protocol: HLLAPI                                                                     |                                                                                |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Use the information from this line in the [HLLAPI] section of the RDSWIN.INI file... | ...as the entry in this field of the New Document Server dialog                |
| HLLAPIVendorName                                                                     | Product Name. Select the product corresponding to the vendor you used to have. |

| Use the information from this line in the [HLLAPI] section of the RDSWIN.INI file... | ...as the entry in this field of the New Document Server dialog |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| HLLAPIVendorDLLPath                                                                  | Product DLL Path                                                |
| HLLTransactionName                                                                   | Transaction Name                                                |
| HLLAPIProcedureName                                                                  | Procedure Name (if present)                                     |

| Protocol: CPI-C                                                                     |                                                                 |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Use the information from this line in the [CPI-C] section of the RDSWIN.INI file... | ...as the entry in this field of the New Document Server dialog |
| CPICVendorName                                                                      | Product Name                                                    |
| CPICVendorDLLPath                                                                   | Product DLL Path                                                |

## 2. Remove obsolete communication configuration sections from your RDSWIN.INI file.

Open your RDSWIN.INI file and delete the following sections: [COMM], [TCPIP], [CPIC], [HLLAPI]. Save and exit the file.

### History File Changes

The format in which the File menu History List items are stored in the RDSWIN.INI file changed. To avoid error messages when you attempt to open documents from the History List, delete the old list as follows:

1. Open your RDSWIN.INI file and go to the [HISTORYLIST] section.
2. Go to the LIST= line and delete it. The following is an example of the History List entry in a RDSWIN.INI file:

```
[HISTORYLIST]
LIST=3,4,6,5,2,1  ← Delete this line
```

3. Save and exit the RDSWIN.INI file.

### Script Changes

To convert your scripts to run in DocumentDirect 2.2, you must:

- Read the section "Script Changes" in "Converting from Version 1.4" and follow the instructions provided.

- Create document server names to match old Server IDs as described below.

### Creating Document Servers to Match Old Server IDs

The document server to which a script connects is specified by a value in the script's ATTACH command. In DocumentDirect 2.2 that value must be the name of a document server, as specified by the Server ID entry in the New Document Server dialog. In DocumentDirect 1.3 and earlier and all versions of INFOPAC-RDS for Windows, the value in the ATTACH command was specified in the Server ID field of the Attach to Server dialog.

To match Server IDs to document servers, do the following:

1. Write down a list of all the Server IDs *exactly* as you entered them in the **Server ID** field of the Attach to Server dialogs.
2. For each Server ID on your list, follow the procedure "Managing Document Servers," in Chapter C1 sure to enter the Server ID from your list in the **Server ID** field of the New Document Server dialog.

Alternatively, you can replace Server IDs in scripts with document server names. Select the method that is best for you. For example, if you have many scripts and only a small number of document servers configured for your workstation, you might prefer to create document servers whose names match the Server IDs. On the other hand, if you have many document servers configured for your workstation and you have only a few scripts, you might prefer to edit the scripts.

To replace Server IDs in scripts with document server names, you must, in each of your scripts, replace the value following SERVERID with the appropriate document server name. The following is an example of a DocumentDirect 1.3 script command that opens a file:

```
ATTACH RECIDID 'ADMIN' ' PASSWORD ' ' SERVERID 'MOBIUS,RDS52'
OPEN REPORTID 'IN001' ' VERSIONID '950727103123' SECTIONID 'MANUEANWK 000000000000002'
```

In this example, the DocumentDirect 1.3 script used SERVERID **MOBIUS,RDS52**, which is changed below to **Sales MVS Server**.

```
ATTACH RECIDID 'ADMIN' ' PASSWORD ' ' SERVERID 'Sales MVS Server'
OPEN REPORTID 'IN001' ' VERSIONID '950727103123' SECTIONID 'MANUEANWK 000000000000002'
```

## Step R3 – Customize Your System

If you want to change DocumentDirect's default configuration, perform Step 2 in Chapter A2. Initial Installation.

## Chapter A5. Full Install from a Network Drive

This chapter is intended for ViewDirect administrators.

Before proceeding with this installation, be sure to review system requirements as described in Chapter A1. Overview of Installation.

To perform a full install of DocumentDirect onto multiple workstations from a network drive, complete the following steps:

Step 1 – Prepare the Installation Files

Step 2 – Install Using the Prepared Files

Step 1 is required. Step 2 is optional.

## ***Step 1 – Prepare the Installation Files***

---

To prepare the installation files, perform the following steps:

1. Create an installation directory on your server, for example, N:\MOBIUS\DDR\Disk1, that your users can access.
2. Copy the files in the Disk1 subdirectory from your DocumentDirect installation media to the Disk1 installation directory on the server.
3. Install DocumentDirect from the Disk1 installation directory onto a workstation by following the Step 1 instructions in Chapter A2. Initial Installation using the installation directory on the server (N:\MOBIUS\DDR\Disk1) as your installation media.
4. Customize the newly installed copy of DocumentDirect to meet the needs of your users. See Chapter 1 for an overview of the various aspects of the system that can be customized and see Appendix C for instructions.

**Note:** When you customize DocumentDirect, the settings associated with the customizations are saved in the RDSWIN.INI file in the C:\WINDOWS directory on the workstation.

5. Replace the default RDSWIN.INI file found in the installation directory on your server (N:\MOBIUS\DDR\Disk1) with the customized version from the workstation.

**Note:** You can make the RDSWIN.INI file read-only in the install directory, but the file in the Windows directory must have read-write access.

## ***Step 2 – Install Using the Prepared Files***

---

Instruct your users to install DocumentDirect from the Disk1 installation directory on your server. If your installation includes either annotations or network server access, tell your users to run the Mobius Database Setup wizard and give them the name of the ODBC data source they must select during the Database Setup process.

Your users can perform a full or custom installation of DocumentDirect as follows:

- If you want your users to perform a full installation of DocumentDirect, they should follow the Step 1 instructions in Chapter A2. Initial Installation, using the SETUP.EXE program found in the installation directory on your server.

As an alternative, you can create a program shortcut to the SETUP.EXE program found in the installation directory on your server and instruct your users to use the shortcut.

- If you want your users to perform a custom installation of DocumentDirect, they should follow the Step 1 instructions in Chapter A2. Initial Installation, using the SETUP.EXE program found in the installation directory on your server.

As an alternative, you can create a program shortcut to the SETUP.EXE program found in the installation directory on your server. The program shortcut should include only the appropriate command line parameters. If you instruct your users to use the shortcut, they will not have to be concerned with the various command line parameters.

This chapter is intended for ViewDirect administrators.

Before proceeding with this installation, be sure to review system requirements as described in Chapter A1. Overview of Installation.

The installation implementations described in Chapter A2. Initial Installation and Chapter A5. Full Install from a Network Drive are standard for most sites. Use the minimal installation described in this chapter when you want to install very few files on each workstation and you want users to run DocumentDirect from a network drive rather than on their workstations. Use this alternate implementation only when the workstations in your enterprise do not have enough space for a full installation and your network can support the increased demand.

To perform a minimal installation on user workstations, complete the following steps:

Step 1 – Install on a Network Drive

Step 2 – Copy System Files to Each Workstation

Step 3 – Create Program Shortcuts

### ***Step 1 – Install on a Network Drive***

---

To install DocumentDirect on a network drive, perform the following steps:

1. Install DocumentDirect onto a network drive by following the Step 1 instructions in Chapter A2. Initial Installation and by specifying the network drive as the destination folder, for example: N:\MOBIUS\DDR, when prompted.
2. Customize the newly installed copy of DocumentDirect to meet the needs of your users. See Chapter 1 for an overview of the various aspects of the system that can be customized and see Appendix C for instructions.

**Note:** When you customize DocumentDirect, the settings associated with the customizations are saved in the RDSWIN.INI file in the C:\WINDOWS directory on the workstation you are using when you perform the installation.

3. Replace the default RDSWIN.INI file found in the destination folder on the network drive (N:\MOBIUS\DDR) with the customized version from the workstation used to perform the installation.

### ***Step 2 – Copy System Files to Each Workstation***

---

You must copy the appropriate DocumentDirect system files to each user's Windows system directory. These DocumentDirect system files are contained in DLLS directories. Copy the



contents of the appropriate DLLS directory to the Windows system directory, which is typically C:\WINDOWS\SYSTEM. The following is a list of DLLS directories:

| Operating System | DLLS Directory           |
|------------------|--------------------------|
| Windows NT       | <install dir>\DLLS\WINNT |
| Windows 95       | <install dir>\DLLS\WIN95 |
| Windows 98       | <install dir>\DLLS\WIN98 |

## Step 3 – Create Program Shortcuts

---

To provide users with access to appropriate DocumentDirect applications, create program shortcuts for the following applications, based on user needs:

| Application File | Application Name               |
|------------------|--------------------------------|
| RDSWIN.EXE*      | DocumentDirect                 |
| ANNMAN.EXE       | Annotation Manager             |
| RDSDBCNV.EXE     | Database 1.3 to 1.4 Conversion |
| RDSCNV32.EXE     | Database 1.4 to 1.5 Conversion |
| VDRCFG.EXE       | Database Setup                 |

If required, you can create more than one version of the RDSWIN.INI profile file and you can control which version DocumentDirect uses at startup. See Chapter C8, "Using Command Line Parameters" for details on using the /PROFILE command line parameter and the other available command line parameters.

## Chapter A7. Uninstalling DocumentDirect

---

To uninstall DocumentDirect, use the **Add/Remove Programs** function on the Windows Control Panel. DocumentDirect's uninstall program removes all DocumentDirect files that are not shared by other applications. Typically, the uninstall program does not remove system DLLs that were installed or updated during the installation process, since they may be shared by other products. It also does not remove any files you created or modified since the original installation. This includes any modifications to the RDSWIN.INI file in the product directory, as well as any resource files created for viewing Laser Printer Formatted Documents (LPFDs).

### Remaining Files

If you uninstall DocumentDirect or DocumentDirect Application Suite, the following files remain on your system:

- the RDSWIN.INI file in the Windows directory.

- the following files in the Windows/System directory:
  - ♦ MFC42.DLL
  - ♦ MSVCRT.DLL
  - ♦ MSVCP60.DLL
  - ♦ CTL3D32.DLL
  - ♦ COMCTL32.DLL
- Microsoft Data Access Components.
- Microsoft DCOM Components for Windows 95 (installed on Windows 95 only).

If you uninstall DocumentDirect Application Suite, the following files also remain on your system:

- the DDRAPP.INI file in the Windows directory
- SC\*.SCR temporary script files in the Windows/Temp directory

## Remaining Registry Keys

DocumentDirect and DocumentDirect Application Suite may add some or all of the keys listed below to the Windows Registry. If you uninstall either product, the following root keys and their subkeys remain in the Windows Registry:

- HKEY\_CLASSES\_ROOT\MSL
- HKEY\_CLASSES\_ROOT\MSLFile
- HKEY\_CLASSES\_ROOT\MIME\Database\Content Type\application.vnd.Mobius.MSL
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\MSL
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\MSLFile
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\MIME\Database\Content Type\application.vnd.Mobius.MSL

If you uninstall DocumentDirect, the HKEY\_CURRENT\_USER\Software\Mobius\DocumentDirect 2.2 key and its subkeys also remain in the Windows Registry.

If you uninstall DocumentDirect Application Suite, the HKEY\_CURRENT\_USER\Software\Mobius\DocumentDirect Application Suite 1.2 key and its subkeys also remain in the Windows Registry.

---

## Appendix B. Error Messages

---

### Introduction

This appendix explains DocumentDirect error messages.

### Contents

Error Messages

### *Error Messages*

---

All DocumentDirect error messages are identified by a 5-character error message identifier. The fifth character indicates the type of message:

| <b>Fifth Character</b> | <b>Message Type</b> |
|------------------------|---------------------|
| I                      | Informational       |
| W                      | Warning             |
| X                      | Exception           |
| E                      | Error               |
| D                      | Disaster            |

Note that DocumentDirect displays user exit messages but does not generate them. Therefore, user exit messages may be in a different format. The message text is generated by the user exit program when the code encounters an error on the document server being accessed. Record the information displayed and refer the problem to your system administrator.

Your system administrator may have customized certain error messages for your application. The message text for these errors may differ from the text described here, but the cause of the error and the action you should take in response remain the same.

---

#### **N108W- Login failed. Invalid Recipient ID or password**

**Reason:** You entered either an incorrect Recipient ID or password.

**Action:** Correct and resubmit.

**N109W- Login failed. Server unavailable.**

**Reason:** ViewDirect for Networks could not connect to the network server selected for login authentication.

**Action:** Do the following:

- Run Authentication Setup to verify the selected authentication method and network server.
  - For authentication against a Windows NT server, verify that the Mobius Authentication Service is installed on the selected server.
- 

**P001W- Field name already exists.**

**Reason:** You attempted to add a field name that already exists.

**Action:** Correct and resubmit with a new field name.

**P002W- Group name already exists.**

**Reason:** You attempted to add a group name that already exists.

**Action:** Correct and resubmit a new group name.

**P003W- Invalid date format – max date will not be set.**

**Reason:** The entry in the Maximum Date field is not valid.

**Action:** Correct and resubmit. The correct format for the Maximum Date is MMDDYYYY, where MM is the month, DD is the day, and YYYY is the year.

**P004W- Invalid date format – min date will not be set.**

**Reason:** The entry in the Minimum Date field is not valid.

**Action:** Correct and resubmit. The correct format for the Minimum Date is MMDDYYYY, where MM is the month, DD is the day, and YYYY is the year.

**P005W- Field name has invalid characters.**

**Reason:** The specified field name is blank or is not valid. Field names can contain only alphanumeric characters and underscores (\_).

**Action:** Correct and resubmit.

**P006W- Group name has invalid characters.**

**Reason:** The specified group name is blank or is not valid. Group names can contain only alphanumeric characters and underscores (\_).

**Action:** Correct and resubmit.

**P007W- You cannot delete a level with field definitions in it.**

**Reason:** You attempted to delete a level that contains field definitions.

**Action:** Delete the field definitions, then delete the level.

**P008W- Minimum value xxx is greater than maximum value yyy – setting maximum value to xxx.**

**Where:** xxx The minimum value specified for a field.

yyy The maximum value specified for a field.

**Reason:** You attempted to specify a minimum value that is greater than the maximum value.

**Action:** Change the minimum or maximum value and resubmit.

**P009W- String contains invalid characters. Only non-blank characters are allowed.**

**Reason:** The string entered contains characters that are not valid. Only non-blank characters are allowed when matching strings for variable length text.

**Action:** Correct the string and resubmit, or change the field type to fixed length text to allow blanks.

**P010W- Do you want to save the changes to policy xxx?**

**Where:** xxx Name of the policy.

**Reason:** You are closing the policy without saving the most recent changes.

**Action:** Do one of the following:

- If you want to save the changes before closing, click **Yes**.
- If you do not want to save changes before closing, click **No**.
- If you do not want to close the policy, click **Cancel**.

**P011W- Unable to save policy. Please close Archive Creation window.**

**Reason:** The Archive Creation Setup dialog is open.

**Action:** Close the Archive Creation Setup dialog, then save and close the Visual Parser window.

**P012E- No policy is currently loaded.**

**Reason:** The script you are executing attempted to export field instances with no policy currently loaded.

**Action:** Manually load the required policy or correct the script.

**P013E- Unable to load policy.**

**Reason:** The policy file is corrupted or does not exist.

**Action:** Verify the policy filename. If the file does exist and it is corrupted, recreate the

policy file.

**P014E- Unable to parse the page.**

**Reason:** The report format does not support logical pages.  
**Action:** Verify that you are applying the policy to the correct report.

**P015E- The session handle passed to function xxx must contain an open policy.**

**Where:** xxx ViewDirect for Windows API function that triggered the error message.  
**Reason:** The program invoked a ViewDirect for Windows API function, passing it a session handle that did not contain a loaded policy when the function requires that a policy be loaded in the given session.  
**Action:** Ask your ViewDirect for Windows API programmer to correct the program so that it successfully loads a policy in the given session before invoking the function specified by xxx.

**P016E- Error parsing policy xxx: Line yyy – zzz**

**Where:** xxx Policy name.  
yyy Line number.  
zzz Policy source line.  
**Reason:** The policy contains an error in the specified line number. This error should not happen and indicates corruption of the policy file or incompatibility of its version.  
**Action:** Delete the policy and recreate it.

**P017E- Invalid policy name.**

**Reason:** You attempted to save the policy, but you did not enter a policy name.  
**Action:** Enter a policy name.

**P018W- Would you like to add the new string match to the list?**

**Reason:** You attempted to close the Field Settings dialog with text entered in the **New string match** field, but you did not previously add the text to the list of matching strings by clicking **Add**.  
**Action:** To add the text to the match list, select **Yes**. To discard the text, select **No**. To continue adding or editing field definitions, select **Cancel**.

**P019E- Enter the metadata key name**

**Reason:** You did not enter the name of the metadata key associated with the metadata field you are creating or editing.  
**Action:** Enter the metadata key name.

**P020E- REPORT\_ID and SECTION\_ID cannot be deleted.**

**Reason:** You attempted to delete a pre-defined Report ID or Section ID.

**Action:** None. Informational.

## **P021E- Enter the field name**

**Reason:** You did not enter the field name of the field you are creating or editing.

**Action:** Enter the field name.

## **P022E- Unable to build the page.**

**Reason:** The page setting parameters do not conform to the sample file format.

**Action:** Correct the page setting parameters.

## **P023E- Unable to open file "xxx".**

**Where:** xxx              Name of the sample file specified in the policy.

**Reason:** The sample file specified in the policy cannot be opened.

**Action:** Select another sample file with the same data layout.

## **P030W- The maximum date cannot be earlier than the minimum date**

**Reason:** You must have an entry in the maximum date field that is greater than the entry in the minimum date field.

**Action:** Change either the maximum date or the minimum date.

## **P034W - Match string "aaaaaaaa" contains a wildcard in an invalid position.**

**Where:** aaaaaaaaa      Character string with an asterisk.

**Reason:** You checked the option to use wildcards in match strings, and the character string above contains an asterisk. The asterisk is only valid as a wildcard at the end of the match string. In the current position, the asterisk cannot be used as a wildcard.

**Action:** Do either of the following:

- Delete the string from the match string list.
- Uncheck the option to use wildcards in match strings.

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## **S001D- An internal system logic error occurred**

**Reason:** An error occurred in the ViewDirect document server component.

**Action:** Click **Technical info ...** Record the information displayed. Exit DocumentDirect and restart it. If the problem persists, refer the problem to your system

administrator.

## **S002E- A system memory allocation error occurred**

**Reason:** A memory shortage occurred in a ViewDirect document server component.

**Action:** Click **Technical info ...** Record the information displayed. Exit Windows, restart it, and then restart DocumentDirect. Refer the problem to your system administrator.

## **S003E- An internal system parameter error occurred**

**Reason:** An error occurred in the ViewDirect document server.

**Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S004E- A system resource could not be found**

**Reason:** A resource, such as a report, section name, or topic, could not be found.

**Action:** Check that the resource name is properly specified. You can select the resource by name from the list of reports, sections, or versions.

## **S005E- The requested search string could not be found**

**Reason:** The requested search string was not found.

**Action:** If you expected to find the search string, check that you properly specified it and retry the search with the correct search string.

## **S006E- A server session has not yet been opened**

**Reason:** One of the following:

1. A programming error occurred in the ViewDirect document server.
2. A script attempted to open a report from a ViewDirect document server without first executing an ATTACH command.

**Action:** **For reason 1:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

**For reason 2:** Re-record your script or manually add an appropriate ATTACH command or replace the OPEN command with an OPENVIEW or OPENTOPIC command.

## **S007E- The current server session status could not be determined**

**Reason:** A programming error occurred in a ViewDirect document server component.

**Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S008E- The current server session status could not be updated**

**Reason:** A programming error occurred in a ViewDirect document server component.

**Action:** Click **Technical info ...** Record the information displayed. Refer the problem to



your system administrator.

## **S009E- The current report access record could not be found**

- Reason:** A file access error occurred in one of the ViewDirect document server components.
- Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S010E- The archive could not be closed**

- Reason:** A file access error occurred in a ViewDirect document server component during an attempt to close an archive dataset.
- Action:** Click **Technical info ...** Record the information displayed. Exit the Viewing and Printing System and try again. Refer the problem to your system administrator.

## **S011E- The archive could not be deallocated**

- Reason:** A file access error occurred in a ViewDirect document server component during an attempt to deallocate an archive dataset.
- Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S012E- The current report access record could not be deallocated**

- Reason:** A file access error occurred in a ViewDirect document server component during an attempt to deallocate a report access record.
- Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S013E- The current server session could not be closed**

- Reason:** A file access error occurred in a ViewDirect document server component during an attempt to close the session.
- Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S014E- The next report page could not be read**

- Reason:** A file access error occurred on the open report archive in the ViewDirect document server.
- Action:** Click **Technical info ...** Record the information displayed. Ask your system administrator to verify report archive integrity.

## **S015E- The requested search string could not be found within the given scope**

- Reason:** The search string you requested was not found in the specified scope.
- Action:** If you expected to find the search string, check that you properly specified it. Retry the search with the correct search string.

## **S016E- An archive has not yet been opened**

- Reason:** An attempt was made to access an archive without first opening the archive. Typically, this message is caused by one of the following:
1. Processing error in a ViewDirect document server component
  2. Incorrect sequence of ViewDirect document server calls from the ViewDirect for MVS API.
- Action:** **For reason 1:** Click **Technical info ...** Record the information displayed. Exit the Viewing and Printing System and try again. Refer the problem to your system administrator.
- For reason 2:** Correct your application program to use the proper sequence of calls to the ViewDirect document server.

## **S017E- The distribution information could not be read**

- Reason:** A file access error occurred during an attempt to read a record from the Distribution database.
- Action:** Click **Technical info ...** Record the information displayed. Ask your system administrator to verify the integrity of copy request records in the Distribution database.

## **S018E- The generic report section index entry could not be read**

- Reason:** A section index entry for the currently opened report could not be read, indicating a ViewDirect document server file access error.
- Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify report archive integrity.

## **S019E- The generic report section index entry could not be found**

- Reason:** A section index entry for the currently opened report could not be found, indicating a ViewDirect document server file access error.
- Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify report archive integrity.

## **S020E- The current report section index entry could not be read**

- Reason:** A section index entry for the currently opened report could not be read, indicating a ViewDirect document server file access error.
- Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify report archive integrity.

## **S021E- The next or previous report section index entry could not be read**

- Reason:** The next or previous section index entry for the currently opened report could not be read, indicating a ViewDirect document server file access error.
- Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify report archive integrity.

## **S022E- The current report page could not be read**

**Reason:** A requested page in the currently opened report could not be read, indicating a ViewDirect document server file access error.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify report archive integrity.

## **S023E- The next or previous report page could not be read**

**Reason:** The next or previous page of the currently open report could not be read, indicating a ViewDirect document server file access error.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify report archive integrity.

## **S024E- The page header information for the page just read is invalid**

**Reason:** The report page to be read was either from a non-standard report, or the page's length or width exceeds the current maximums.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify report archive integrity.

## **S025D- The page record could not be decompressed**

**Reason:** A report data error occurred in one of the ViewDirect document server components.

**Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S026E- The requested report could not be found**

**Reason:** The report name specified in the Report ID field could not be found.

**Action:** Retry the function with a different report name.

## **S027E- A report record could not be read while building the report list**

**Reason:** A file access error occurred on the database during an attempt to read a record.

**Action:** Click **Technical info ...** Record the information displayed. Exit Windows, restart it, and then restart DocumentDirect. Refer the problem to your system administrator.

## **S028W- The end of the report list has been reached**

**Reason:** The end of the report names list has been reached.

**Action:** None. Informational.

## **S029E- A report version record could not be read**

**Reason:** A file access error occurred on the Versions database during an attempt to read a version record.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify the integrity of version records in the Versions database.

## **S030E- The first report section index entry could not be read**

**Reason:** The first entry in the section index of the currently open report could not be read, indicating a ViewDirect document server file access error.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify report archive integrity.

## **S031E- The report hierarchy record could not be read**

**Reason:** A file access error occurred on the database during an attempt to read a record.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify the integrity of hierarchy records in the Distribution database.

## **S032E- The requested version could not be found**

**Reason:** The specified Version ID could not be located. Possible causes are:

- The specified version does not exist.
- You are not authorized to view the specified version.
- The report file name is using a missing storage class name.
- The storage class is using an external storage system that is unavailable.

**Action:** Retry the function with a different Version ID. Contact your system administrator to determine the reason the version was not found.

## **S033E- A version record could not be read while building the version list**

**Reason:** A ViewDirect document server file access error occurred on the Versions database during an attempt to read a version record.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify the integrity of version records in the Versions database.

## **S034W- The end of the version list has been reached**

**Reason:** The end of the list of report names has been reached.

**Action:** None. Informational.

## **S035E- The current report status could not be determined**

**Reason:** A ViewDirect document server file access error occurred on the Versions database during an attempt to read a version record.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify the integrity of version records in the Versions database.

## **S036E- The distribution information could not be found**

**Reason:** You do not have an appropriate copy request record to be able to access to the desired report or topic.

**Action:** Click **Technical info ...** Record the information displayed. Request that your system administrator provide you with access to the report.

## **S037E- The requested version could not be read**

**Reason:** A ViewDirect document server file access error occurred during an attempt to read a record from the Versions database.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify the integrity of version records in the Versions database.

## **S038E- The report access record could not be allocated - IIT limit reached**

**Reason:** A resource limitation error occurred in one of the ViewDirect document server components.

**Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S039D- The report access record could not be allocated - customization error**

**Reason:** A customization error occurred in one of the ViewDirect document server components.

**Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S040E- The report access record could not be allocated - reason unknown**

**Reason:** A file access error occurred in one of the ViewDirect document server components.

**Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S041E- The version status could not be determined**

**Reason:** A ViewDirect document server file access error occurred during an attempt to read a record from the Versions database.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify the integrity of version records in the Versions database.

## **S042E- The archive is currently unavailable**

**Reason:** The requested archive dataset is currently in use by another task. This normally indicates that an archive dataset is in the process of being recalled to disk.

**Action:** Attempt to access this archive later, or retry the function with a different report name, topic name, or Version ID.

## **S043E- The archive could not be found**

**Reason:** An attempt was made to open an archive dataset that could not be found. This message usually indicates that the archive dataset was deleted using facilities other than those provided by ViewDirect for MVS.

**Action:** Request that your system administrator restore the archive dataset if possible.

## **S044E- Archive mount in progress. Try again later**

**Reason:** The requested archive dataset resides on a removable medium, such as tape or optical disk, which is in the process of being mounted.

**Action:** Attempt to access this archive later, or select a different report, topic, or version.

## **S045E- An external system error occurred while checking the version status**

**Reason:** A ViewDirect document server file access error occurred on the Versions database during an attempt to read a version record.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify the integrity of version records in the Versions database.

## **S046E- The archive could not be allocated**

**Reason:** A file access error occurred in a ViewDirect document server component during an attempt to allocate an archive dataset.

**Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S047E- The archive could not be opened**

**Reason:** A file access error occurred in a ViewDirect document server component during an attempt to open an archive dataset.

**Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator. Try again with a different version or report.

## **S048E- The security information could not be read**

**Reason:** A file access error occurred on the Distribution database during an attempt to read a record.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify the integrity of security view records in the Distribution database.

## **S049E- The distribution information could not be processed**

**Reason:** An error occurred in a ViewDirect document server component.

**Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S050D- The distribution information does not exist**

**Reason:** No distribution information is available for the desired report or topic.

**Action:** Click **Technical info ...** Record the information displayed. Ask your system administrator to check distribution information for the report or topic.

## **S051E- A recipient record could not be found for you**

**Reason:** A recipient record has not been defined for you.

**Action:** Click **Technical info ...** Record the information displayed. Ask your system administrator to add a recipient record for you.

## **S052E- Your recipient record could not be read**

**Reason:** A ViewDirect document server file access error occurred on the Distribution database during an attempt to read your recipient record.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify the integrity of the security view records in the Distribution database.

## **S053E- Your password is invalid**

**Reason:** An incorrect password was supplied.

**Action:** Supply the correct password.

## **S054E- A server session could not be opened**

**Reason:** An error occurred in one of the ViewDirect document server components.

**Action:** Click **Technical info ...** Record the information displayed. Refer the problem to your system administrator.

## **S055E- The previous report section index entry could not be read**

**Reason:** The previous report section index entry could not be read, indicating a ViewDirect document server file access error.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify report archive integrity.

## **S056E- The next report section index entry could not be read**

**Reason:** The next report section index entry could not be read, indicating a ViewDirect document server file access error.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify report archive integrity.

## **S057E- The last report section index entry could not be read**

**Reason:** The last section index entry could not be read, indicating a ViewDirect document server file access error.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify report archive integrity.

## **S058E- The report record could not be found**

**Reason:** The report record could not be found on the Distribution database, indicating a ViewDirect document server file access error.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify the integrity of security view records in the Distribution database.

## **S059E- The report record could not be read**

**Reason:** The report record could not be read on the Distribution database, indicating a ViewDirect document server file access error.

**Action:** Click **Technical info ...** Record the information displayed. Have your system administrator verify the integrity of security view records in the Distribution database.

## **S060E- Communications to the server could not be initialized**

**Reason:** A communications error occurred in one of the ViewDirect document server components of DocumentDirect.

**Action:** Click **Technical info ...** Record the information displayed. Review your communications connection for problems.

## **S061E- An error occurred in the communications with the server**

**Reason:** A communications error occurred in one of the ViewDirect document server components of DocumentDirect.

**Action:** Click **Technical info ...** Record the information displayed. Review your communications connection for problems.

## **S062E- Communications to the server could not be terminated**

**Reason:** A communications error occurred in one of the ViewDirect document server components of DocumentDirect.

**Action:** Click **Technical info ...** Record the information displayed. Review your communications connection for any problems. Refer the problem to your system administrator.

## **S063E- Your RDSWIN.INI file is not configured for communications**

**Reason:** A configuration error was detected. Either the RDSWIN.INI file could not be found in your Windows directory, or no properly configured document servers exist.

**Action:** Review the configuration of the document server.

## **S064E- Your RDSWIN.INI specifies an unrecognized value for the API parameter**

**Reason:** A configuration error was detected in your document server.

**Action:** Review the configuration of the document server.



## **S065E- Your chosen communications DLL could not be found. Check the path**

**Reason:** A configuration error was detected in your document server. The product DLL for the specified protocol could not be located or it returned an error when initialized.

**Action:** Review the configuration of the document server. Verify that the full path and DLL name are correct and that the DLL exists in the specified directory.

## **S066E- No HLLAPI DLL specified**

**Reason:** A configuration error was detected in your document server. The product DLL for HLLAPI was not specified.

**Action:** Review the configuration of the document server. Verify that the full path and DLL name are correct and that the DLL exists in the specified directory.

## **S067E- Your chosen HLLAPI DLL could not be found. Check the configured path**

**Reason:** A configuration error was detected in your document server. The product DLL for HLLAPI could not be located or it returned an error when initialized.

**Action:** Review the configuration of the document server. Verify that the full path and DLL name are correct and that the DLL exists in the specified directory.

## **S068E- The override procedure name for unrecognized HLLAPI not found**

**Reason:** A configuration error was detected in your document server. The procedure name was not specified or is incorrect.

**Action:** Review the procedure name and product name in the Edit Document Server dialog.

## **S069E- Your chosen HLLAPI DLL did not contain the procedure specified**

**Reason:** A configuration error was detected in your document server. The procedure name was not specified or is incorrect.

**Action:** Review the procedure name and product name in the Configuration dialog.

## **S070E- No CPIC DLL specified**

**Reason:** A configuration error was detected in your document server. The CPI-C Procedure Name field in the New/Edit Document Server dialog does not contain a valid value.

**Action:** Review the configuration of the document server. Verify that the full path and DLL name are correct and that the DLL exists in the specified directory.

## **S071E- CPIC implementation missing or unknown**

**Reason:** A configuration error was detected in your document server. The CPI-C Product Name field in the New/Edit Document Server dialog does not contain a valid value.

**Action:** In the Edit Document Server dialog, select a valid value for the CPI-C Product Name field.

## **S072E- WINAPPC must be running before you start RDSWIN**

- Reason:** You have not properly started WINAPPC, or a customization error was detected in your RDSWIN.INI file. The configured product name specifies Novell, and the WINAPPC.EXE program was not properly started.
- Action:** Be sure you have correctly started WINAPPC. Refer to the Novell NetWare LU6.2 for Windows documentation.

## **S073E- Your chosen CPIC DLL could not be found. Check the configured path**

- Reason:** A configuration error was detected in your document server. The DLL file specified by the CPI-C product DLL could not be located or it returned an error when initialized.
- Action:** Review the configuration of the document server. Verify the full path and DLL name are correct and that the DLL exists in the specified directory.

## **S074E- A system logic error occurred. Exit program**

- Reason:** The CPI-C or HLLAPI DLL file specified for the document server could not be freed properly from memory.
- Action:** Click **Technical info ...** Record the information displayed. Exit Windows, restart it, and then restart DocumentDirect. Refer the problem to your system administrator.

## **S075E- You do not have viewing access**

- Reason:** You are not authorized to view the requested report.
- Action:** Ask your system administrator to modify your Recipient ID to allow viewing access.

## **S076E- Request rejected by user exit**

- Reason:** The action you requested is not allowed.
- Action:** Ask your system administrator why the request was rejected.

## **S077E- Customization error**

- Reason:** A ViewDirect document server feature was incorrectly customized.
- Action:** Click **Technical info ...** Record the technical information from the message and refer the problem to your system administrator.

## **S078E- External system error**

- Reason:** An error occurred in an external module, for example, SORT or IDCAMS.
- Action:** Have your system administrator review the information output by the module in question.

## **S079E- Operation canceled at user request**

**Reason:** You requested that the operation be canceled.

**Action:** None.

## **S080E- Software version mismatch**

**Reason:** The software version specified by your communications DLL is incompatible with the software version of the ViewDirect document server to which you are attempting to attach.

**Action:** Verify that your document server is configured for the ViewDirect document server version you are using.

## **S081E- An archive is already open**

**Reason:** Another archive is already open during an attempt to open an archive. Typically, this message is caused by one of the following:

1. A processing error in a ViewDirect document server component
2. Incorrect sequence of ViewDirect document server calls from the ViewDirect for MVS API

**Action:** **For reason 1:** Click **Technical info ...** Write down the information displayed. Exit the Viewing and Printing System and try again. Refer the problem to your system administrator.

**For reason 2:** Correct your application program to use the proper sequence of calls to the ViewDirect document server.

## **S082E- Installation error - system record not found**

**Reason:** The system record was not found in the Versions database.

**Action:** Click **Technical info ...** Record the information. Refer the problem to your system administrator.

## **S083E- fname not defined in FCT**

**Where:** fname          Filename

**Reason:** The specified file was not found in the CICS FCT.

**Action:** Click **Technical info ...** Record the information. Refer the problem to your system administrator.

## **S084E- The archive allocate/open request has timed out**

**Reason:** The Archive I/O Subsystem for the device on which the report version resides could not allocate or open the report within the time limit specified in the Subsystem Management Table (SMT).

**Action:** Try again to access the report. If this problem persists, ask your system administrator to investigate why the report version cannot be opened within the allocated time. The administrator may need to increase the amount of time specified in the TALOC and/or TOPEN parameters of the Archive I/O Subsystem's SMT.

## **S085E- Recall request issued. Try again later**

- Reason:** The version of the report requested is not currently available online because it has already been migrated. The report is being recalled to online status.
- Action:** ViewDirect for MVS automatically submits a job to recall the archive. Retry the viewing request when the report is on disk and its STATUS is AVAILABLE.

## **S086E- The requested topic could not be found**

- Reason:** No topics could be found for the specified Topic ID. Either the requested topic does not exist, or you are not authorized to view the topic.
- Action:** Retry with a different Topic ID or contact your system administrator to determine why the requested Topic ID could not be found.

## **S087E- No topic items found**

- Reason:** No entries were found for the topic item specified because of the currently open topic versions:
- topic version - Does not contain the requested topic item
  - topic version - Topic item refers to a deleted report version
  - topic version - Topic item refers to report pages you are not authorized to view
- Action:** Retry with a different topic item, or select a different topic version with the same topic item.

## **S088E- Unsupported server request issued**

- Reason:** The function requested is not supported by the viewing ViewDirect document server currently in use.
- Action:** Contact your system administrator to determine why the function is not supported by the viewing ViewDirect document server; it may be necessary to upgrade the version of the viewing document server.

## **S089E- Access by topic item is not supported for this report version**

- Reason:** The report version specified cannot be accessed through a topic item. This error occurs during an attempt to access a report archive created by INFOPAC-RDS for MVS 5.1 or earlier or ViewDirect for MVS 1.1. Typically, this message is caused by one of the following:
1. A processing error in a ViewDirect document server component
  2. Incorrect sequence of ViewDirect document server calls from the ViewDirect for MVS API
- Action:** **For reason 1:** Your installation may wish to recreate the report version using Enterprise Indexing functions to support access via topic items.
- For reason 2:** Correct your application program to use the proper sequence of calls to the ViewDirect document server.

**S090E- Session timed out, Reason xx**

|               |            |                                                                                      |
|---------------|------------|--------------------------------------------------------------------------------------|
| <b>Where:</b> | xx         | Return code from the ViewDirect for MVS document server:                             |
|               | 01, 03, 07 | Maximum ViewDirect for MVS document server acquisition/re-acquisition time exceeded. |
|               | 02, 05     | Automatic re-connect prevented.                                                      |
|               | 04         | Attempt to retry a failed allocation during error reset interval.                    |
|               | 06         | Maximum re-connect time exceeded.                                                    |
|               | 11         | Open timeout.                                                                        |
|               | 12         | Allocation timeout.                                                                  |
|               | 13         | Read request timeout.                                                                |

**REASON=01, 03, or 07:****Maximum ViewDirect for MVS document server acquisition/re-acquisition time exceeded.**

**Reason:** You were unable to acquire an Archive I/O Subsystem server within the specified time because all available ViewDirect for MVS document servers were busy or the ViewDirect for MVS document server associated with the requested archive or volume was allocated to another user.

**Action:** Contact your system administrator.

The system administrator may wish to increase one or more of the following: the NUMENT value which is the number of entries in the SMT, the TINIT value, and the TREST value.

- If you are trying to **open a version**, the maximum acquisition time is specified by the TINIT parameter of the Subsystem Management Table (SMT) for the Archive I/O Subsystem.
- If you are trying to **resume access to a version** you previously opened, for example, to scroll to another page or locate a section, the maximum acquisition time is specified by the TREST parameter on the SMT.

**REASON=02 or 05:****Automatic re-connect prevented.**

**Reason:** The Viewing and Printing System released an archive or because Archive I/O Subsystem server stealing occurred or an archive or volume on the ViewDirect for MVS document server had not been accessed for TUSER seconds. The Viewing and Printing System did not try to re-establish access to the archive or volume because the SMT was customized with REALLOC=NO.

**Action:** Contact your system administrator.

The system administrator may wish to increase the TUSER value in the SMT, increase the TINIT value, specify REALLOC=YES, or all three.

**REASON=04:****Attempt to retry a failed allocation during error reset interval.**

**Reason:** When an allocation or open fails because the open or allocation took longer than

allowed (see reason codes 11 and 12), the Viewing and Printing System remembers the failure for TERR seconds. If you request the same archive within TERR seconds, the Viewing and Printing System returns this reason code.

**Action:** Contact your system administrator.

Ask the system administrator the number of seconds specified by TERR and wait that number of seconds before trying to access the version again. The administrator may wish to decrease the TERR seconds in the SMT to prevent excessively frequent recurrences of this condition.

## **REASON=06:**

### **Maximum re-connect time exceeded.**

**Reason:** The Viewing and Printing System released the archive or volume you were using because either:

- Archive I/O Subsystem server stealing occurred.
- The archive or volume on the ViewDirect for MVS document server was not accessed for TUSER seconds.

Because the Subsystem Management Table (SMT) parameter REALLOC was set to YES, the Viewing and Printing System tried to re-establish access to a ViewDirect for MVS document server but was unable to do so within the period specified by the TREST parameter on the SMT.

**Action:** Contact your system administrator.

The system administrator may wish to increase the NUMENT value, that is, number of entries, in the SMT, increase the TREST value, or both.

## **REASON=11:**

### **Open timeout.**

**Reason:** The Viewing and Printing System was unable to open an archive within the number of seconds specified by the TOPEN parameter of the Archive I/O Subsystem Management Table (SMT). For archives on tape, a volume is mounted during open processing.

**Action:** Contact your system administrator.

Ask the system administrator why opening the archive takes longer than the time allowed. The administrator may wish to increase the TOPEN value in the SMT.

## **REASON=12:**

### **Allocation timeout.**

**Reason:** The Viewing and Printing System was unable to complete a dynamic allocation of an archive within the number of seconds specified by the TALOC parameter of the Archive I/O Subsystem Management Table (SMT).

**Action:** Contact your system administrator.

Ask the system administrator why allocating the archive takes longer than the time allowed. The administrator may wish to increase the TALOC value in the SMT.

## **REASON=13:**

### **Read request timeout.**

- Reason:** The Viewing and Printing System issued a request to the FileTek Storage Machine for a read, and the request did not complete within the number of seconds specified by the TSERV parameter of the Archive I/O Subsystem Management Table (SMT).
- Action:** Contact your system administrator.
- Ask the system administrator why reading records from the archive takes longer than the time allowed. The administrator may wish to increase the TSERV value in the SMT.

**S091E-xxxxxxx JCL NOT SUPPLIED**

- Where:** xxxxxxxx JCL ID
- Reason:** During an attempt to create a job to recall a migrated archive, the JCL ID identified was not found in the JCL table. The JCL ID is one of the following:
- MRECALL - system default for recalling archives migrated using ViewDirect for MVS utilities.
  - RECALL - system default for recalling report archives migrated by an SMS product.
  - TRECALL - system default for recalling topic archives migrated by an SMS product.
  - *all others* - Any JCL ID other than MRECALL or RECALL is the result of an INEXIT14 override of one of the two system defaults.
- Action:** Create the JCL ID identified in the JCL table and resubmit the recall.

**S092E- Archive subsystem is inactive**

- Reason:** An attempt was made to access an archive on-line while the appropriate Archive I/O Subsystem was inactive. The Archive I/O Subsystem in question was either deactivated or did not initialize successfully.
- Action:** Contact your system administrator. Refer to "VTAMAPPL Control Commands" and "CICS Transactions" in the *ViewDirect for MVS User's Guide* for instructions on restarting an Archive I/O Subsystem.

**S093E- Recipient ID does not exist**

- Reason:** The Recipient ID you entered is not in the Distribution database.
- Action:** Correct the error and try again. If you are unsure about your Recipient ID, contact your system administrator.

**S095E- Not authorized for online access**

- Reason:** The Recipient ID you entered is not authorized for access either to viewing or to Database Maintenance through ViewDirect for MVS or ViewDirect for Networks.
- Action:** Contact your system administrator to see why you are not authorized for online access.

**S096I- Enter Recipient ID**

**Reason:** The Recipient ID field was left blank.  
**Action:** Enter your Recipient ID in the Recipient ID field.

**S098I- Password changed for recipient xxxxxxxx**

**Where:** xxxxxxxx Recipient ID  
**Reason:** Password change was successful.  
**Action:** None. Informational.

**S099E-Recipient password change rejected, rc = nn**

**Where:** nn Return code from the ViewDirect document server

|    |                                                                                |
|----|--------------------------------------------------------------------------------|
| 17 | Database Maintenance is not active in the same address space or VSE partition. |
| 18 | DBMAINT is not in program STARTLIST.                                           |
| 19 | Invalid password specified.                                                    |

**Reason:** Password change was not successful.

**Action:** If RC=17, try to change the password when Database Maintenance is active. Contact your system administrator to find out when Database Maintenance is active.

If RC=18, contact Mobius Customer Support.

If RC=19, change the password using only valid characters.

Contact your system administrator, who may wish to look at the Database Maintenance Transaction Edit Listing for messages indicating other reasons the password change transaction failed. Correct the error and retry.

**S100E- You do not have topic access**

**Reason:** You are not authorized to use the requested topic to select reports for viewing.  
**Action:** Contact your system administrator and request that your Recipient ID be modified to allow you to select reports by topic.

**S101E- The requested script record could not be found**

**Reason:** A 3270 Script request, either PLAYBACK or DELETE, has specified a name which is not in the database.  
**Action:** Check the spelling of the name specified.



|                |                                                                                                                                     |                                                                                                                                                |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Where:</b>  | nnn                                                                                                                                 | Message ID. Messages in the form "Wnnn" indicate a Windows message. Messages in the form "Snnn" indicate a ViewDirect document server message. |
|                | xxx                                                                                                                                 | Data for the missing error message                                                                                                             |
|                | yyy                                                                                                                                 | Data for the missing error message                                                                                                             |
|                | zzz                                                                                                                                 | Data for the missing error message                                                                                                             |
| <b>Reason:</b> | The indicated message could not be presented because it has not yet been translated for the language in use.                        |                                                                                                                                                |
| <b>Action:</b> | Refer the problem to your system administrator. The administrator may need to contact Mobius Customer Support for updated messages. |                                                                                                                                                |

## **W001E- No unfrozen region found**

|                |                                                               |
|----------------|---------------------------------------------------------------|
| <b>Reason:</b> | A search was attempted where all text was frozen.             |
| <b>Action:</b> | Clear the current view and retry the search on unfrozen text. |

## **W002E- Caret must start from unfrozen region**

|                |                                                                                 |
|----------------|---------------------------------------------------------------------------------|
| <b>Reason:</b> | A string search was attempted when the caret was positioned in a frozen region. |
| <b>Action:</b> | Move the caret to an unfrozen region and retry the search.                      |

## **W003W- The text you were searching for was not found**

|                |                                                                                                                                                                                                                                               |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reason:</b> | The text specified for the search string was not found.                                                                                                                                                                                       |
| <b>Action:</b> | Retry the find with different text, or starting from a different position within the page. Be sure that the text is spelled correctly. If the As Is option was selected, make sure the case of the search matches the contents of the report. |

## **W004E- No previous search was done, so you may not search again**

|                |                                                                        |
|----------------|------------------------------------------------------------------------|
| <b>Reason:</b> | You executed a Find Next command when no initial search was performed. |
| <b>Action:</b> | Invoke the Find command and specify a search string.                   |

## **W005E- The position of your caret undefined or not visible**

|                |                                                                                |
|----------------|--------------------------------------------------------------------------------|
| <b>Reason:</b> | A search was attempted while the caret could not be found.                     |
| <b>Action:</b> | Reposition the caret so that it is visible on the screen and retry the search. |

## **W006E- The caret must be visible on screen when Copy or Move attempted**

|                |                                                                                                                   |
|----------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Reason:</b> | You attempted to move or copy a block to the current caret position when the caret was not visible on the screen. |
| <b>Action:</b> | Reposition the caret so that it is visible on the screen and retry the Copy or Move command.                      |

## **W007E- No file loaded: cannot go to page**

|                |                                                             |
|----------------|-------------------------------------------------------------|
| <b>Reason:</b> | A Go To command was attempted while there was no open file. |
|----------------|-------------------------------------------------------------|

**Action:** Open a report and retry the Go To command.

## **W008E- Report could not be loaded**

**Reason:** The file identified by a DOS path and filename specified could not be opened.

**Action:** Check the name and path of the file identified by a DOS path and filename and retry.

## **W009E- Cannot freeze from mark when mark is not entirely on screen**

**Reason:** You attempted to freeze a marked block when not all of the mark was visible.

**Action:** Scroll the window so that the marked region is fully visible, or recreate the mark and then retry the freeze.

## **W010E- Cannot freeze from mark when no mark is available**

**Reason:** You attempted to invoke a freeze using a mark when no region was marked.

**Action:** Mark text and retry the command.

## **W011E- Cannot move mark when there is no mark**

**Reason:** You attempted a move current mark when no region was marked.

**Action:** Specify a mark and retry the command.

## **W012E- Cannot copy mark when there is no mark**

**Reason:** You attempted a copy current mark when no region was marked.

**Action:** Specify a mark and retry the command.

## **W013E- Cannot hide mark when there is no mark**

**Reason:** You attempted a hide current mark when no region was marked.

**Action:** Specify a mark and retry the command.

## **W014W- You are about to close your currently open report. Is this OK?**

**Reason:** The active report is closed by the current request.

**Action:** If the report should be closed, click YES. If the report should not be closed, click NO.

## **W015E- Blank Server ID is not valid**

**Reason:** You requested an attach to server function with no Server ID specified in the Server ID field.

**Action:** Enter a value in the Server ID field and retry the function.

## **W016E- Blank Recipient ID is not valid**

**Reason:** You requested an attach to server function with no Recipient ID specified in the

Recipient ID field.

**Action:** Enter a value in the Recipient ID field and retry the function.

## **W017E- Report ID required to access archive**

**Reason:** You requested an attach to server function with no Report ID specified in the Report ID field.

**Action:** Enter a value in the Report ID field and retry the function.

## **W018E- Non-blank file name required for version list**

**Reason:** You requested an attach to server function with no Report ID specified in the Report ID field.

**Action:** Enter a value in the Report ID field and retry the function.

## **W019E- "Upper or Left" Must be Numeric**

**Reason:** The number specified in the Upper or Left field was not a number.

**Action:** Enter a number in the Upper or Left field.

## **W020E- "Lower or Right" Must be Numeric**

**Reason:** The number specified in the Lower or Right field was not a number.

**Action:** Enter a number in the Lower or Right field.

## **W021E- "From" Must be Less Than or Equal To "To"**

**Reason:** The number in the From field was greater than the number in the To field.

**Action:** Re-enter the contents of the fields so that the number in the From field is lower than the number in the To field.

## **W022D- Parameter Error: rpt is NULL or not loaded**

**Reason:** A Go To command was attempted when there was no loaded report or the report was invalid.

**Action:** Open a report and retry the command.

## **W023E- Invalid page number: Page number must be positive**

**Reason:** A negative page number was specified in a Go To command.

**Action:** Specify a positive page number and retry.

## **W024E- "Row" Must contain a positive number**

**Reason:** The Row field does not contain a positive number.

**Action:** Enter a positive number in the Row field.

## **W025E- "Col" Must contain a positive number**

**Reason:** The Col field does not contain a positive number.

**Action:** Enter a positive number in the Col field.

**W026E- "Width" Must contain a positive number**

**Reason:** The Width field does not contain a positive number.

**Action:** Enter a positive number in the Width field.

**W027E- "Height" Must contain a positive number**

**Reason:** The Height field does not contain a positive number.

**Action:** Enter a positive number in the Height field.

**W028E- "Upper" Must contain a positive number**

**Reason:** The Upper field does not contain a positive number.

**Action:** Enter a positive number in the Upper field.

**W029E- "Left" Must contain a positive number**

**Reason:** The Left field does not contain a positive number.

**Action:** Enter a positive number in the Left field.

**W030E- Invalid range: start page must be positive and less than or equal to end page**

**Reason:** You specified an invalid page range.

**Action:** Reenter the page range so that the starting number is less than or equal to the ending page number.

**W031W- DocumentDirect is currently printing. Proceeding will cancel all pending print jobs. Do you want to proceed?**

**Reason:** DocumentDirect was printing in the background when you did one of the following:

- Turned off background printing in the Preferences dialog.
- Attempted to exit DocumentDirect.

**Action:** Click **Yes** to proceed and cancel all pending print jobs. Click **No** to return to DocumentDirect. After you return to DocumentDirect, you can click the Printer button on the DocumentDirect status bar to view a list of pending print jobs.

**W032W- Exiting. Do you wish to close your report?**

**Reason:** You are closing DocumentDirect with a report still open.

**Action:** Click **YES** to close the report and exit. Click **NO** to cancel the close request and return to the active document.

**W033E- Page number must be numeric and non-zero**

**Reason:** A Go To command was attempted for a page that was not a positive number.  
**Action:** Retry the command, with a positive number entered in the Page Number field.

**W034E- The current page size is too large to print. Please scale the page down and try again**

**Reason:** The page is too large to be printed.  
**Action:** Scale the report to a smaller size and try again.

**W035E- The DLL required to render that image type is not installed.**

**Reason:** The Image component was not installed.  
**Action:** Reinstall DocumentDirect. If you are using the custom installation method, ensure that you select the Image component.

**W038D- Not enough timers available to continue. Close application**

**Reason:** Timers are a limited resource in the Windows environment. DocumentDirect could not allocate a timer for its own use.  
**Action:** Shut down DocumentDirect, then close another Windows application that uses timers. Restart DocumentDirect.

**W039E- A report page positioning error has occurred**

**Reason:** An unknown error occurred during an attempt to get a report page from the ViewDirect document server. This is usually due to a communications problem.  
**Action:** Click **Technical info ...** Record the information displayed. If the technical information does not indicate a communications problem, contact your system administrator.

**W040W- The top of the report has been reached.**

**Reason:** You attempted to scroll past the top of the report.  
**Action:** None. Informational.

**W041W- The bottom of the report has been reached.**

**Reason:** You attempted to scroll past the bottom of the report.  
**Action:** None. Informational.

**W042W- You have no RDSWIN.INI file.**

**Reason:** No RDSWIN.INI file was found when an attach to server command was invoked.  
**Action:** Create an RDSWIN.INI file.

**W043W- Starting page does not exist.**

**Reason:** The starting page number for a print or export command was greater than the number of pages in the report.

**Action:** Change the starting page number and try the operation again.

## **W044E- Text xxx was not found**

**Where:** xxx Text being searched for

**Reason:** The text you searched for was not found.

**Action:** Reenter the search text, or start the Find from a different position within the page. Be sure that the text is spelled correctly. If the As Is option was selected, make sure the case of the search matches the contents of the report.

## **W045E- Syntax Error- Invalid data: xxx**

**Where:** xxx Data that is invalid.

**Reason:** The script contains an erroneous command or parameter.

**Action:** On the specified line, correct the command syntax.

## **W046E- Syntax Error: Missing parameter: xxx**

**Where:** xxx Missing parameter

**Reason:** A script command lacks a required parameter.

**Action:** Add the missing parameter.

## **W047E- I/O error with file: xxx**

**Where:** xxx File with which error occurred

**Reason:** An error occurred when DocumentDirect tried to read or write to the file.

**Action:** Look at the file to verify that it contains the data you expect. If you were trying to save the file, verify that there is sufficient disk space for the file.

## **W048E- Script I/O error**

**Reason:** An error occurred while reading or writing a script file.

**Action:** Verify that the file exists and that you have rights to the directory where it is located. If the error occurred when you were saving the script, check that there is sufficient disk space for the file.

## **W049E- Error opening: xxx for read**

**Where:** xxx File that DocumentDirect is attempting to read

**Reason:** DocumentDirect encountered an error opening a file identified by a DOS path and filename, image file, or script.

**Action:** Check that the filename is correct and re-try the operation. If the filename is correct, check that the file is not damaged. If this error occurs while attempting to run a PLAYBACK script command, make sure that the script you are trying to play back is not already running.

## **W050E- Error opening: xxx for write**

**Where:** xxx File that DocumentDirect is attempting to write

**Reason:** DocumentDirect encountered an error saving a script or exported file.

**Action:** Check that the filename is correct and re-try.

## **W051E- Block xxx does not exist**

**Where:** xxx Name of the block

**Reason:** An action was attempted on an attribute block that does not exist.

**Action:** Change the block name to an existing block name, or add attributes to a block named xxx.

## **W052E- Item xxx is not valid**

**Where:** xxx Invalid item

**Reason:** One of the following:

1. A parameter or data item is incorrect or is out of the valid range.
2. A data item is missing keys.

**Action:** **For reason 1:** Correct the indicated item so it conforms to the proper range or syntax.

**For reason 2:** Ensure that the INI file contains all required keys and that the values are valid.

## **W053E- Script Error: Script is unexpectedly NULL or empty**

**Reason:** An internal logic or memory error occurred.

**Action:** Verify that you have enough available memory. If the problem persists, contact your system administrator.

## **W054E- Unable to output the item requested**

**Reason:** You tried to establish a DDE link using a script that closes the report to which it assigns attributes.

**Action:** Use a text editor to edit the script, and comment out or delete the line that closes the report from which you wish to obtain data. Make a line into a comment by typing a semicolon at the beginning of the line. The semicolon prevents that line from executing when the script is run. Verify that your script does not close the window containing that item.

## **W055E- Error xxx executing: yyy**

**Where:** xxx Error code

yyy File being executed

**Reason:** The Run command within a script or from the DocumentDirect File menu caused an error.

**Action:** Refer the problem to your system administrator.

## **W056E- Anchor does not exist**

**Reason:** You selected **Edit|Mark Anchor to Caret**, or performed the equivalent action using a script, before dropping an anchor.

**Action:** Be sure to drop an anchor before selecting **Edit|Mark Anchor to Caret**.

## **W057E- The anchor and caret must both be in an unfrozen region or the same frozen region.**

**Reason:** You tried **Edit|Mark Anchor to Caret** in one of the following situations:

1. When the anchor was in a frozen region while the caret was not, or vice-versa.
2. When the anchor was in a frozen region and the caret was also in a frozen region, but not in the same frozen region as the caret.

**Action:** Be sure the anchor and caret are both in the same frozen region or that no region is frozen.

## **W058W- All or part of the marked area contains attributes**

**Reason:** You attempted to add attributes to an area which already has attributes assigned to all or part of it. If you add attributes to this area, the new attributes replace the existing attributes.

**Action:** If you wish to change the attributes, continue the operation. If you do not want to change the attributes, stop the operation and re-select the area to which you intend to add attributes.

## **W059E- Cannot assign attributes when there is no mark**

**Reason:** You attempted to add attributes when no mark existed.

**Action:** Mark the area to which you want to add attributes before selecting Add Attributes.

## **W060E- DDE error - case unknown**

**Reason:** An unknown error was encountered while processing a DDE request.

**Action:** Retry the operation. If the problem persists, contact your system administrator.

## **W061E- A DDE server setup error has occurred**

**Reason:** DocumentDirect could not register itself as a DDE server. If you continue, DDE services are likely not to be available.

**Action:** If you need to link to DocumentDirect via DDE, shut down DocumentDirect, re-start Windows and then try starting DocumentDirect again. If that fails, verify that DDEML.DLL is either in the same directory as RDSWIN.EXE or in your Windows directory.

## **W062E- A critical DDE error has occurred**

**Reason:** DocumentDirect has been notified by Windows that a DDE error has occurred. This usually means that memory is low. Data may be lost or the system may fail.



**Action:** Shut down DocumentDirect, restart Windows and try again.

## **W063E- Unable to terminate DDE server**

**Reason:** A DDE agent did not respond to DocumentDirect and is preventing it from terminating properly.

**Action:** Shut down DocumentDirect, restart Windows and try again.

## **W064E- Function could not be performed on report**

**Reason:** You requested an operation that could not be performed due to the current state of the report.

**Action:** Verify that all of the proper conditions exist for the desired action.

## **W065E- Window xxx does not exist**

**Where:** xxx MDI window you attempted to switch to

**Reason:** A script SWITCH command requested a window name that does not exist.

**Action:** Load the report indicated by the switch or change the name to an existing window name.

## **W066W- Not enough memory to complete operation. Close some windows and try again.**

**Reason:** The operation you requested could not be completed due to insufficient memory. Typically, this message results from one of the following reasons:

1. Trying to run DocumentDirect while simultaneously running too many applications in the same Windows session.
2. Selecting **Edit|Copy to Clipboard ...** and specifying a page range that is too large to fit into memory.
3. Requesting an operation on a graphical page, for example, **View|Rotate 90**.
4. Requesting an operation when a resource such as a DLL is missing from the directory and search path.

**Action:** **For reason 1:** Close one or more of the other applications you are running before starting DocumentDirect. As an alternative, make more conventional memory available to Windows by removing unnecessary device drivers from your CONFIG.SYS or AUTOEXEC.BAT.

**For reason 2:** Close some open windows and try again. As an alternative, copy fewer pages to the clipboard.

**For reason 3:** Close one or more of the open windows and try again.

**For reason 4:** Verify that all required resources are available and try the operation again.

## **W067E- Error disconnecting previous DDE conversation**

**Reason:** While you tried to establish a new DDE link to RDSWIN, your last link could not be disconnected.

**Action:** Ignore the error and continue. If ignoring the error causes problems, shut down

DocumentDirect, restart Windows, and try again.

## **W068E- Printer setup error. Use Control Panel to check your printer settings**

- Reason:** A printer setup error occurred while you were trying to print or while you were trying to print or while you were trying to set up your printer
- Action:** Run the Windows Control Panel. In the Control Panel, select **Settings|Printers....** The Printers dialog is displayed. In the Printers dialog, verify that you have at least one printer installed, and that there is a default printer. If no printers are listed under Installed Printers, you must add a printer to your system by clicking **Add>>>** then selecting from the list of available printers. If the Default Printer dialog reads No Default Printer, you must set a default printer by double clicking one of the printers listed under Installed Printers.

## **W069E- Topic ID required for version list**

- Reason:** You attempted to view a version list without specifying a Topic ID.
- Action:** Specify a Topic ID and retry the function.

## **W070W- You are about to close the current topic. Is this OK?**

- Reason:** The topic index currently open will be closed before a different topic index is opened. The information in the topic item list is retrieved from the topic index identified by the topic name and version; changing either of those fields opens a new topic index when you view the topic item list.
- Action:** If you want to view the new topic index, click **Yes**; otherwise click **No**.

## **W071E- Topic ID required to access a topic**

- Reason:** You attempted to view a topic item without first specifying a Topic ID.
- Action:** Specify a Topic ID and retry the function.

## **W072E- Topics are not supported on this server.**

- Reason:** The ViewDirect document server to which you are connected does not support Enterprise Indexes.
- Action:** Check with your system administrator to see if Enterprise Indexes are supported in your installation.

## **W073E- AFP Error: xxx, with resource yyy, type zzz.**

- Where:**
- |     |                     |
|-----|---------------------|
| xxx | Explanatory message |
| yyy | Resource name       |
| zzz | Type of resource    |
- Reason:** An error was encountered processing the IBM AFP resource indicated.
- Action:** Delete all copies of the resource found in the directory specified by your AFP Resource Path in the **Options|Preferences** dialog and retry. If the problem persists, ask your system administrator to verify the integrity of the resource on the ViewDirect document server.

**W074W- AFP Warning: xxx, with resource yyy, type zzz.**

**Where:**     xxx           Explanatory message  
             yyy           Resource name  
             zzz           Type of resource

**Reason:**    A warning resulted from processing the IBM AFP resource indicated.

**Action:**     Delete all copies of the resource found in the directory specified by your AFP Resource Path in the Options|Preferences dialog and retry. If the problem persists, ask your system administrator to verify the integrity of the resource on the ViewDirect document server.

**W075E- AFP Error: xxx**

**Where:**     xxx           Explanatory message

**Reason:**    An error resulted during an attempt to display an IBM AFP page.

**Action:**     Retry the transaction that loaded the page. If problem persists, ask your system administrator to verify the integrity of the resource on the ViewDirect document server.

**W076W- AFP Warning: xxx**

**Where:**     xxx           Explanatory message

**Reason:**    A warning resulted during an attempt to display an IBM AFP page.

**Action:**     None. Warning is informational.

**W077W- DJDE/Metacode Warning: xxx, with resource yyy, RC=aaa, RE=bbb**

**Where:**     xxx           Explanatory message  
             yyy           Resource name  
             aaa           DJDE/Metacode return code  
             bbb           DJDE/Metacode reason code

**Reason:**    A warning resulted during an attempt to display a Xerox DJDE/Metacode page.

**Action:**     None. Warning is informational. The page displayed as accurately as possible.

**W078E- DJDE/Metacode Error: xxx, with resource yyy, RC=aaa, RE=bbb**

**Where:**     xxx           Explanatory message  
             yyy           Resource name  
             aaa           DJDE/Metacode return code  
             bbb           DJDE/Metacode reason code

**Reason:**    An error resulted from processing the indicated Xerox DJDE/Metacode resource.

**Action:**     Delete all copies of the resource found in the directory specified by your DJDE Resource Path in the Options|Preferences dialog and retry. If the problem persists, ask your system administrator to verify the integrity of the resource on

## **W079E- Windows help system could not be started**

**Reason:** Available memory is not sufficient to run the Help system.

**Action:** Close some windows and try accessing the Help system again.

## **W080E- Syntax error: 'xxx' must be in quotes**

**Where:** xxx Text requiring quotation marks.

**Reason:** All character data requires quotation marks. The parameter shown must be within single or double quotes.

**Action:** Edit the parameter so it is within single or double quotes.

## **W081E- 'xxx' must be numeric**

**Where:** xxx Invalid text string.

**Reason:** The parameter shown is non-numeric and must contain only numeric data.

**Action:** Change the parameter so that it contains only numeric data. Decimal point are allowed.

## **W082E- Could not find xxx**

**Where:** xxx Object that DocumentDirect is looking for

**Reason:** Object xxx could not be found where specified.

**Action:** Verify that xxx exists. If so, try again.

## **W083E- Error processing image**

**Reason:** The image file you are viewing might be invalid, corrupted, or using a feature not supported by DocumentDirect.

**Action:** If possible, recreate the image. If you still have problems viewing it, contact your system administrator.

## **W084E- Unsupported image type**

**Reason:** One of the following:

1. The image file is damaged.
2. The image file has a file extension that does not represent the actual image type. For example, a Windows bitmap should use a BMP extension.
3. The image you are trying to view is not a supported image type.

**Action:** **For reason 1:** If you can view another page of the archive or another image file of the same type, the file is probably damaged. If possible, recreate the image. If you still have problems viewing it, contact your system administrator.

**For reason 2:** Rename the file using the correct file extension.

**For reason 3:** Ask your system administrator if the image can be converted to a

## **W085E- Image too big ( larger than 16MB )**

**Reason:** The image you tried to view is too big to be displayed.

**Action:** Ask your system administrator to recreate the image so that it is less than 16MB.

## **W086E- Error displaying image**

**Reason:** An error resulted during an attempt to display an image.

**Action:** Contact your system administrator.

## **W087E- Installation error: xxx not found.**

**Where:** xxx Component of the DocumentDirect system that could not be found

**Reason:** DocumentDirect could not find one of its components.

**Action:** Reinstall DocumentDirect. If the problem persists, contact your system administrator.

## **W088E- Text 'xxx' not found in yyy. Do you want to continue?**

**Where:** xxx Search text

yyy Number of pages searched

**Reason:** The search string 'xxx' was not found within the indicated number of pages from the caret position.

**Action:** To continue the search, select Yes. To end the search, select No.

## **W089E- Item 'xxx' is not defined for topic 'yyy.'**

**Where:** xxx Block name, that is, DDE item name, specified via a DDE link

yyy Script name, that is, DDE topic name, specified via a DDE link

**Reason:** The specified item is not defined by the specified script.

**Action:** Verify the accuracy and spelling of both the item and script names. Reestablish the DDE link after correcting the item or topic name.

## **W090I- Please wait. Processing your request for block 'xxx' defined in script 'yyy'**

**Where:** xxx Block name (DDE item name) specified via a DDE link

yyy Script name (DDE topic name) specified via a DDE link

**Reason:** You have requested a DDE link to the data of block xxx defined in script yyy.

**Action:** Wait until DocumentDirect finishes running script yyy. After the script has run to completion, this message is replaced by the linked data.

## **W092E- Topic item required to select a report archive**

**Reason:** The item field in the Attach to Server dialog is a required field. It cannot be left blank.

**Action:** Enter a topic item in the topic item field.

**W093E- Specified item, report or version not found in topic**

**Reason:** The item specified in the item field does not occur in the archive specified by the report and report version fields in the Attach to Server dialog.

**Action:** Drop down the topic list and select a valid archive from the list.

**W094E- An internal logic error occurred in communication with the server**

**Reason:** An unexpected error occurred in communications with the ViewDirect document server.

**Action:** Retry the operation. If the problem persists, contact your system administrator.

**W095E- Authorization code is invalid, program will use default authorization**

**Reason:** The authorization code in your RDSWIN.INI file is invalid. The program operates only in demonstration mode. ViewDirect document server communications are disabled. Typically, this message is caused by one of the following:

1. You received a new authorization code, but did not enable it.
2. You have enabled features that are not functioning.

**Action:** **For reason 1:** Enable the new authorization code.

**For reason 2:** Contact your system administrator.

**W096E- The following option is not enabled: xxx**

**Where:** xxx Disabled option

**Reason:** You attempted to use an option that is disabled.

**Action:** If the option should be enabled, contact your system administrator.

**W097W- Could not write resource xxx to resource path 'yyy'.**

**Where:** xxx Resource that could not be written

yyy Path to which resource could not be written

**Reason:** DocumentDirect is unable to write the resource to the resource directory. Either the resource path is invalid, or you do not have write access to the path.

**Action:** Verify that resource path yyy exists. Verify the path syntax specified in the Options|Preferences dialog. Verify the user's access right to the path. In the Preferences dialog, modify the resource path to a valid path to which the user has write access or uncheck the Cache Resources check box.

**W098E- The requested list is empty**

**Reason:** The list you attempted to view is empty or does not contain any items you are authorized to view.

**Action:** If the list is not empty, refer the problem to your system administrator to verify

your access authorization.

**W099E- No TCP/IP DLL specified.**

- Reason:** The TCP/IP communications DLL is not specified in the document server configuration.
- Action:** Review and correct the contents of the Edit Document Server dialog to indicate the correct TCP/IP communications DLL.

**W100E- Could not initialize the TCP/IP Protocol Stack. Check your configured path.**

- Reason:** The TCP/IP protocol stack could not be initialized.
- Action:** Select **Options|Configure Document Servers**. Make sure the Edit Document Server|Product DLL Path field for the document server that produced the error points to the correct path and DLL. Review your TCP/IP protocol stack installation with your TCP/IP protocol vendor.

**W101E- Your chosen communications DLL could not be found. Check the configured path**

- Reason:** A configuration error was detected in your document server configuration. The communications DLL file specified in the Edit Document Server dialog could not be found or properly loaded.
- Action:** Select **Options|Configure Document Servers**. Review the communications settings for the document server.

**W102E- Link disconnected by client application while processing 'xxx'**

- Where:** xxx Script filename DocumentDirect is running
- Reason:** You requested a DDE link to an item defined by topic xxx. Typically, this message is caused by one of the following:
1. While DocumentDirect was running script xxx, the DDE link was canceled or deactivated by the client application.
  2. The client application timed out the DDE link.
  3. You used manual links instead of automatic links.
- Action:** **For reason 1:** Verify that you are not doing anything that causes the client application to cancel the DDE request.
- For reason 2:** Verify that your client application does not time out DDE requests.
- For reason 3:** Make sure you are using automatic links instead of manual links.

**W103E- Page contents invalid**

- Reason:** One of the following:
1. For a text report, the page data was corrupted.
  2. For an LPFD report, the LPFD page data downloaded from the ViewDirect document server is not valid, or was corrupted during transmission.
- Action:** Click **Technical info ...** Record the information displayed. Review your

communications connection.

**For reason 1:** Recreate the archive.

**For reason 2:** Ask your system administrator to verify the integrity of the resource on the ViewDirect document server.

#### W104E- Windows library load error xxx, library name yyy

**Where:** xxx Microsoft Windows API failure code.

**Reason:** A DLL cannot be loaded. This can happen because the DLL is missing, cannot be found, or is corrupted.

For information on the most common Microsoft Windows API failure codes, see below:

#### Return Codes 00 - 14

A DLL cannot be loaded. This can happen because the DLL is missing, cannot be found, or is corrupted.

| Where<br>RC= | Reason                                                                              | Action                                                                                                                 |
|--------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| 00           | System was out of memory, executable file was corrupt, or relocations were invalid. | Close one or more of the other applications you are running before starting DocumentDirect.                            |
| 02           | File not found.                                                                     | Verify the accuracy and spelling of the specified filename.                                                            |
| 03           | Path not found.                                                                     | Verify the accuracy and spelling of the specified path.                                                                |
| 04           | Too many files are open.                                                            | Close some of the files you are using before starting DocumentDirect.                                                  |
| 05           | Sharing or network protection error.                                                | Verify that no other user is currently using the resource and that you have appropriate access rights to the resource. |
| 06           | Invalid handle returned when attempting to load the file.                           | Close one or more applications before starting DocumentDirect.                                                         |
| 08           | Insufficient memory to start the application.                                       | Close one or more of the other applications you are running before starting DocumentDirect.                            |
| 11           | DLL has incorrect format.                                                           | Obtain the correct DLL.                                                                                                |
| 14           | Insufficient storage.                                                               | Close one or more applications before starting DocumentDirect.                                                         |

#### Return Codes 15 - 1157, and YYY

A DLL cannot be loaded. This can happen because the DLL is missing, cannot be found, or is corrupted.



A DLL cannot be loaded. This can happen because the DLL is missing, cannot be found, or is corrupted.

| Where<br>RC= | Reason                                                                   | Action                                                                                        |
|--------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| 15           | Drive not found.                                                         | Verify that you have access rights to the drive.                                              |
| 32           | File in use by another process.                                          | Close one or more applications before starting DocumentDirect.                                |
| 33           | File locked by another process.                                          | Close one or more applications before starting DocumentDirect.                                |
| 36           | Too many files open to permit sharing.                                   | Close one or more applications before starting DocumentDirect.                                |
| 53           | Network path not found.                                                  | Verify the accuracy and spelling of the specified path.                                       |
| 54           | Network is busy.                                                         | Try the operation again.                                                                      |
| 59           | Unexpected network error.                                                | Try the operation again. If the problem persists, verify network settings.                    |
| 111          | Filename too long.                                                       | Rename the file with a shorter name.                                                          |
| 123          | Filename, directory name, or volume label syntax is incorrect.           | Verify the accuracy and spelling of the specified filename, directory name, and volume label. |
| 144          | Directory not found.                                                     | Verify the accuracy and spelling of the specified directory name.                             |
| 161          | Path invalid.                                                            | Verify the accuracy and spelling of the specified path.                                       |
| 267          | Directory name invalid.                                                  | Verify the accuracy and spelling of the specified directory name.                             |
| 1157         | One of the library files needed to run this application cannot be found. | Verify that DLLs were properly installed.                                                     |
| YYY          | Name of the library that could not be loaded.                            |                                                                                               |

#### W105E- External interface xxx invalid

**Where:** xxx Name of the external library

**Reason:** The indicated DLL is an incorrect version or corrupted.

**Action:** Reinstall DocumentDirect, as described in Appendix A of the *DocumentDirect User's Guide*.

#### W106W- File xxx already exists

**Where:** xxx File with full path name

**Reason:** You are trying to save or export to file "xxx," which already exists.

**Action:** Click **OK** to overwrite the existing file. Click **Cancel** to cancel saving or exporting the specified file.

## W107D- An internal system logic error occurred

**Reason:** An error occurred in one of the Windows components of DocumentDirect.

**Action:** Click **Technical info ...** Record the information displayed. Exit DocumentDirect and restart it. Refer the problem to your system administrator.

## W108E- A system memory allocation error occurred

**Reason:** A memory shortage occurred in one of the Windows components of DocumentDirect.

**Action:** Close applications that are not required for operation of DocumentDirect.

## W109E- A report has not yet been opened

**Reason:** You attempted to perform an action that cannot be performed unless a report is open.

**Action:** Open a file identified by a DOS path and filename or a report from a ViewDirect document server, then perform the action again.

## W110W- Could not get xxx yyy

**Where:** xxx Resource type. Possible values are Font, Image 600, Image 300, Form, Logo, JDE, JDL, Font Width Table, Overlay, Page Segment, Codepage, Coded Font, Character Set, Formdef, Pagedef, Data Map, and Resource.

yyy Name of the resource.

**Reason:** DocumentDirect could not obtain the specified resource from the ViewDirect document server. Lack of this resource may cause the AFP or DJDE/Metacode report you are viewing to display incorrectly.

**Action:** Make the specified resource available to DocumentDirect by placing it in your resource path.

## W111E- Image size must be between xxx and yyy percent of original size

**Reason:** A value that is either too large or too small was entered for the height or width of an image.

**Action:** Enter a value within the specified range.

## W112E- DJDE/Metacode Error: xxx, RC=aaa, RE=bbb

**Where:** xxx Explanatory message

aaa DJDE/Metacode return code

bbb DJDE/Metacode reason code

**Reason:** An error resulted during an attempt to render a Xerox DJDE/Metacode page.

**Action:** If the report is open, close it. Restart DocumentDirect and try to load the report again. If the problem persists, exit Windows and restart. If the problem still persists, refer the problem to your system administrator.

## **W113W- DJDE/Metacode Warning: xxx, RC=aaa, RE=bbb**

**Where:**        xxx            Explanatory message  
                  aaa            DJDE/Metacode return code  
                  bbb            DJDE/Metacode reason code

**Reason:** A warning resulted during an attempt to render a Xerox DJDE/Metacode page.

**Action:** None. The warning is informational. The page will be displayed as accurately as possible.

## **W114E - "xxx" is not a valid selection**

**Where:**        xxx            User-specified input

**Reason:** The selection indicated is not valid.

**Action:** Enter another selection. The validity of a selection depends on the context of the message. To find appropriate input values, refer to the section of the user's guide or Help system that addresses the operation you are attempting.

## **W115E - "xxx" is not a valid "yyy"**

**Where:**        xxx            User-specified input  
                  yyy            Type of input

**Reason:** The entry is blank, of invalid length, or contains invalid characters.

**Action:** Correct the entry.

## **W116E - Block "xxx" already exists**

**Where:**        xxx            Block name specified by user

**Reason:** You are trying to assign the name of an existing block to a new block.

**Action:** Enter a name that is not currently assigned to any other block.

## **W117E - Requested value xxx is too big for yyy, value set to zzz**

**Where:**        xxx            User-specified input  
                  yyy            Function to be performed  
                  zzz            The maximum allowable value for the requested function

**Reason:** The value you entered for this function exceeds the allowable limit.

**Action:** The value for the requested action is automatically set to the maximum allowable value.

**W118E - Requested value xxx is too small for yyy, value set to zzz**

**Where:**        xxx            User-specified input  
                 yyy            Function to be performed  
                 zzz            The minimum allowable value for the requested function

**Reason:**     The value you entered for this function is below the allowable limit.

**Action:**       The value for the requested action is automatically set to the minimum allowable value.

**W119E - The NLS module could not be loaded**

**Reason:**     The requested National Language Support module could not be found or successfully loaded.

**Action:**       Verify your installation of DocumentDirect. If you are using a language module that is not supported by your Windows environment, the system language defaults to U.S. English, if that module is available. Refer to the README file to determine if your language is supported, then verify that the appropriate DLL is in the same directory as RDSWIN.EXE.

**W121E - Your CPI-C software could not be initialized**

**Reason:**     The CPI-C software that you attempted to use could not be initialized.

**Action:**       Review the installation of your CPI-C software. Verify that your CPI-C software supports Windows CPI-C standards, version 1.0.

**W122W - Cannot read from drive xxxxx**

**Where:**        xxxxx            The drive's identifying letter

**Reason:**     An error was encountered while trying to read data on a disk drive.

**Action:**       If the drive is a floppy diskette drive, make sure a floppy disk is inserted. If the drive is a CD-ROM drive, make sure the appropriate CD is in the drive. If the drive is a network drive, make sure your network is functioning properly.

**W123E- Unable to initialize database interface environment.**

**Reason:**     A failure occurred attempting to interface to the ODBC driver manager. This may be due either to a lack of memory or a problem with the ODBC installation.

**Action:**       Close other programs to free up memory and retry. If the command fails again, verify that ODBC is installed correctly.

**W124E- The driver for xxx is not ODBC Level 1 compliant. Try a different driver.**

**Where:**        xxx            Name of an ODBC data source.

**Reason:**     Your ODBC driver does not meet the ODBC Level 1 compliance threshold.

**Action:**       Contact your database vendor for a newer driver or try a different database.

**W125E- ODBC error: "xxx"**

**Where:** xxx Message returned by ODBC.

**Reason:** ODBC returned an error message when it encountered a problem interfacing to your data or communicating with ViewDirect for Networks. Typically, this message is caused by one of the following:

1. Failure to specify an ODBC data source in Mobius Database Setup.
2. If your site uses another vendor's database, failure to specify an ODBC data source using the ODBC Administrator before running the Mobius Database Setup procedure.
3. Failure in the ODBC database system.
4. More than one user attempted to simultaneously update the same database table.

**Action:** **For reason 1:** Follow the Mobius Database Setup procedure.

**For reason 2:** Run the program ODBCADM.EXE, usually located in the Windows\System directory, and set up the desired ODBC data source. Then follow the Mobius Database Setup procedure.

**For reason 3:** Refer the problem to your system administrator.

**For reason 4:** Click the appropriate button on the error dialog. If you click **Ignore**, annotation changes are discarded, and the requested operation continues.

## W126E- xxx "yyy" already exists.

**Where:** xxx Key field.

yyy Value entered in the key field.

**Reason:** You attempted to add a record using a key that already exists. The attempt failed because key fields must be unique.

**Action:** Correct and resubmit.

## W127E- Unable to add xxx "yyy".

**Where:** xxx Type of record.

yyy Value entered in the key field.

**Reason:** You attempted to add the specified record, but the attempt failed.

**Action:** Verify that the database engine is correctly installed and sufficient disk space is available to add data to the database.

## W128E- Unable to add xxx "yyy": the specified zzz does not exist.

**Where:** xxx Type of record.

yyy Value entered in the key field.

zzz A report, report version, topic, or topic version referenced in the record you are attempting to add.

**Reason:** You attempted to add a record that references a nonexistent report, report version, topic, or topic version. The attempt failed.

**Action:** Add the appropriate report, report version, topic, or topic version and try again.

## **W129W- End of list**

**Reason:** More data was requested than actually exists.

**Action:** None. Informational.

## **W130E- The value xxx of parameter number yyy in a call to function zzz is invalid.**

**Where:**

|     |                                                                       |
|-----|-----------------------------------------------------------------------|
| xxx | Invalid parameter value.                                              |
| yyy | Number of the parameter in the function call with the invalid value.  |
| zzz | ViewDirect for Windows API function that triggered the error message. |

**Reason:** The program invoked a ViewDirect for Windows API function call with an invalid parameter value.

**Action:** Have your ViewDirect for Windows API programmer correct the parameter value.

## **W131E- Unable to update xxx "yyy".**

**Where:**

|     |                                 |
|-----|---------------------------------|
| xxx | Type of record.                 |
| yyy | Value entered in the key field. |

**Reason:** You attempted to update the specified record, but the attempt failed.

**Action:** Verify that the database engine is correctly installed and that there is sufficient disk space is available to add data to the database.

## **W132E- Unable to delete xxx "yyy": one or more zzz which reference it still exist.**

**Where:**

|     |                                                              |
|-----|--------------------------------------------------------------|
| xxx | Type of record.                                              |
| yyy | Value entered in the key field.                              |
| zzz | The table that currently contains references to that record. |

**Reason:** You attempted to delete the specified record, but another table has records that reference this record. A record cannot be deleted until records from all tables that reference it are deleted. For example, all versions of a report must be deleted before the report can be deleted.

**Action:** Delete the appropriate records and try again.

## **W133E- Unable to delete xxx "yyy".**

**Where:**

|     |                                 |
|-----|---------------------------------|
| xxx | Type of record.                 |
| yyy | Value entered in the key field. |

**Reason:** You attempted to delete the specified record, but the attempt failed.

**Action:** Verify that the database engine is correctly installed.

## **W134E- The session handle passed to function xxx already contains an open archive.**

- Where:** xxx ViewDirect for Windows API function that triggered the error message.
- Reason:** The program invoked a ViewDirect for Windows API function, passing it a session handle containing an open archive when the function requires that no archive be open in the given session.
- Action:** Have your ViewDirect for Windows API programmer correct the program so that any open archive in the given session is closed before invoking the function specified by xxx.

## **W135E- Server / database mismatch error.**

- Reason:** You attempted to retrieve a type of information that does not exist in the database. This message typically indicates a version mismatch between the DocumentDirect or ViewDirect for Networks components.
- Action:** Verify that DocumentDirect or ViewDirect for Networks is correctly installed and that all components are from the same release of the product.

## **W136E- The session handle passed to function xxx must contain an open archive.**

- Where:** xxx ViewDirect for Windows API function that triggered the error message.
- Reason:** The program invoked a ViewDirect for Windows API function, passing it a session handle that did not contain an open archive when the function requires that an archive be open in the given session.
- Action:** Have your ViewDirect for Windows API programmer correct the program so that it successfully opens an archive in the given session before invoking the function specified by xxx.

## **W137E- Field xxx of parameter yyy in call to zzz contains an invalid value.**

- Where:** xxx Number of the field of parameter yyy containing an invalid value.
- yyy Number of the parameter in error in the ViewDirect for Windows API function call.
- zzz ViewDirect API function that triggered the error message.
- Reason:** The program invoked a ViewDirect for Windows API function, passing it a structure with an invalid field value.
- Action:** Have your ViewDirect for Windows API programmer correct the program so that it passes a structure with valid field values.

## **W138E- ODBC driver not responding as expected. Try a different driver.**

- Reason:** The ODBC driver is behaving in an unexpected or inconsistent manner. This message indicates that the driver is defective.
- Action:** Contact your database vendor for a different driver or try a different database.

## **W139E- Duplicate or reserved document server name**

- Reason:** In the Server ID field in the New or Edit Document Server dialog, you tried to

assign a document server name that is already in use, or you assigned "Local Server," which is reserved for use by DocumentDirect.

**Action:** Supply a unique, non-reserved name for this document server.

## **W140E- Image sub-type information is available only for image pages.**

**Reason:** The program invoked the ViewDirect for Windows API VdrGetPageInfo function, requesting image sub-type information for a page that does not contain image data.

**Action:** Have your ViewDirect for Windows API programmer correct the program so that it verifies that the page contains image data before requesting image sub-type information.

## **W141E- xxx is available only for text pages.**

**Where:** xxx A description of the request.

**Reason:** The program invoked a VdrGetPageInfo function call requesting xxx for a page that does not contain text data when the requested information is available only for text pages.

**Action:** Have your ViewDirect for Windows API programmer correct the program so that it verifies that the page contains text data before requesting xxx.

## **W142E- The requested item could not be found.**

**Reason:** The requested item does not exist or you are not authorized to access it.

**Action:** Ask your system administrator to verify your access authorization and that the item exists.

## **W143E- The session handle passed to function xxx already contains an open topic.**

**Where:** xxx ViewDirect for Windows API function that triggered the error message

**Reason:** The program invoked a ViewDirect for Windows API function, passing it a session handle that contained an open topic when the function requires that no topic be open in the given session.

**Action:** Have your ViewDirect for Windows API programmer correct the program so that it closes any open topic in the given session before invoking the function specified by xxx.

## **W144E- The session handle passed to function xxx must contain an open topic.**

**Where:** xxx ViewDirect for Windows API function that triggered the error message

**Reason:** The program invoked a ViewDirect for Windows API function, passing it a session handle that did not contain an open topic when the function requires that a topic be open in the given session.

**Action:** Have your ViewDirect for Windows API programmer correct the program so that it successfully opens a topic in the given session before invoking the function specified by xxx.



**W145E- Cannot call xxx while prior call to yyy has not completed.**

**Where:**        xxx            ViewDirect for Windows API function that triggered the error message

                  yyy            ViewDirect for Windows API function currently running

**Reason:**        The program invoked a ViewDirect for Windows API function while another ViewDirect for Windows API function was still running.

**Action:**        Have your ViewDirect for Windows API programmer correct the program so that it does not issue a ViewDirect for Windows API function call until the previous completes. For more information, refer to the *ViewDirect for Windows API Reference Guide*.

**W146E- Data validation error: xxx**

**Where:**        xxx            Description of the error

**Reason:**        DocumentDirect detected an error in the page data it was trying to load.

**Action:**        Ask your system administrator to verify the integrity of the archive.

**W147E- Selected page exceeds section limit.**

**Reason:**        You attempted to access a page beyond DocumentDirect's page limit for a single report section.

**Action:**        Ask your system administrator to reduce the number of pages in the section that caused the error by subdividing it into smaller sections.

**W148E- Incompatible version xxx found of component yyy, version zzz is required**

**Where:**        xxx            Actual version date of the component

                  yyy            Path and filename of the incompatible component

                  zzz            Expected version date of the component

**Reason:**        The indicated component has the wrong version date. Depending on the component, the application may or may not run with reduced features. Typically, this message is caused by one of the following:

1. Multiple Mobius applications are installed that have incompatible versions, and one of the applications was running when another one was started.
2. The application is finding components from a different version of the same application.
3. An Engineering Build supplied by Mobius Customer Support was installed on your system, for example, a modified DLL.

**Action:**        **For reason 1:** Do not run two applications from incompatible versions simultaneously.

**For reason 2:** Verify that the component found is located in the directory from which you are running the application. If it is not, make sure that the workstation DOS PATH does not list any directories containing a different installation of the application. Install the product in a new directory, and delete or rename the old directory.

**For reason 3:** Contact Mobius Customer Support for instructions on how to run the application using the Engineering Build.

## **W149E- Maximum number of sessions already open for this server**

- Reason:** Some document servers support a limited number of open sessions at one time. For example, HLLAPI document servers cannot support more than one session at a time, with one open report in that session.
- Action:** Either use a different document server to open the report or close one or more open sessions for the current document server.

## **W150W- File xxx already exists. Replace?**

- Where:** xxx                      Filename
- Reason:** The filename to which you are trying to export data already exists.
- Action:** Select **Yes** if you want to overwrite the existing file. Select **No** to return to the Export To File dialog and reenter the filename.

## **W151E- Cannot append to xxx. The file is not in the appropriate format.**

- Where:** xxx                      Name of the file specified for export
- Reason:** You attempted to append formatted data to a file that is not in the same format as data to be appended.
- Action:** Open the Export To File dialog again and enter a different filename in the Filename field.

## **W152E- Error attempting to execute script command xxx from script yyy line zzz**

- Where:** xxx                      Failed script command, including any prompt entered by the user  
yyy                      Name of the script file  
zzz                      Line where the error occurred.
- Reason:** The script command failed, possibly because incorrect data was entered in a script parameter.
- Action:** Select **Retry** to replay the script command. Select **View Error** to see the DocumentDirect error message. Select **Cancel** to abort the script and display the associated DocumentDirect error message.

## **W153E- File xxx does not exist**

- Where:** xxx                      Filename
- Reason:** One of the following:
1. You attempted to open a script that does not exist.
  2. You attempted to use a file that does not exist or that is missing resources such as DLLs.
- Action:** **For reason 1:** Change the filename so that it refers to an existing script file.  
**For reason 2:** Verify that all required resources are in the specified directories

and paths.

## **W154E- Extension .MSL or .SCR expected for a script file**

**Reason:** Script files are required to have an .MSL or .SCR extension.

**Action:** Change the script filename so that it has an .MSL or .SCR extension.

## **W155E- Filename too long.**

**Reason:** The archive cannot be created because Archive Creator, using the Archive Model File Name, created a filename that is longer than 255 characters.

**Action:** Use Database Maintenance to fix the Archive Model File Name field of the Report record in question.

## **W156E- Extension .PRJ expected for a project file**

**Reason:** DocuAnalyzer project files are required to have .PRJ extensions.

**Action:** Change the project filename so that it has a .PRJ extension.

## **W157E- DBI could not find database schema version. DBI expects version xxx.**

**Where:** xxx            The expected database schema version number.

**Reason:** The database cannot be opened because the Database Interface subsystem was unable to retrieve the schema version number from the Mobius database you are configured to use. The database may be out of date or damaged.

**Action:** Ask your system administrator to run the Data Source Setup utility.

## **W158E- Incompatible database version. Run Database Conversion to update version xxx to version yyy**

**Where:** xxx            The existing database schema version number.

yyy            The expected database schema version number.

**Reason:** The database cannot be opened because the schema version number returned from the Mobius database you are configured to use is different than the version required by the Database Interface subsystem. The most likely cause is that the database is from a previous release of ViewDirect for Networks.

**Action:** Ask your system administrator to run the Data Source Setup utility.

## **W159E- Error detected. A description of the problem is not available.**

**Reason:** An unexpected error was encountered during program execution.

**Action:** Retry the action that caused the problem. If the problem persists, contact your system administrator.

## **W161E- Unable to make filename unique: xxx**

**Where:** xxx            The filename that cannot be made unique by Archive Creator.

**Reason:** The archive cannot be created because Archive Creator is attempting to satisfy the %UNIQUE% substitutable field, but cannot produce a unique filename. It is

likely that the names of existing files in the directory exhaust all possible unique filenames.

**Action:** Delete unneeded files to free usable filenames, or use Database Maintenance to edit the Archive Model File Name field of the Report record in question to allow a longer unique string within the filename.

## **W162E- I/O error while processing image.**

**Reason:** An error was detected while reading or writing an image. The image may be corrupted, or the disk or network may have failed.

**Action:** Restart Windows and again try to view the image. If the problem persists, recreate the image, if possible. If the problem still persists, contact your system administrator.

## **W163E- The session handle passed to function xxx is not connected.**

**Where:** xxx ViewDirect for Windows API function that triggered the error message

**Reason:** The program invoked a ViewDirect for Windows API function, passing it a session handle that is not connected to a document server.

**Action:** Verify that the document server is running. Then try connecting again.

## **W164E- The current session could not be closed**

**Reason:** The session could not be shut down.

**Action:** Exit and restart DocumentDirect and retry your actions. If the problem persists, click on **Technical info ...** and record the information displayed. Refer the problem to your system administrator.

## **W165E- A session could not be opened**

**Reason:** One of the following:

1. DocumentDirect could not open a new session with the ViewDirect document server.
2. HLLAPIViewer.exe could not open a connection to the specified session.

**Action:** **For reason 1:** View the document server settings in the Document Servers dialog. Verify that your communication protocol settings are correct; refer to Appendix C2. If the problem persists, click **Technical info ...** and record the information displayed. Refer the problem to your system administrator.

**For reason 2:** Check that the presentation space (session ID) specified in the HLLAPIViewer.EXE command is correct. If the problem persists, contact your system administrator.

## **W166E- Communications could not be initialized**

**Reason:** DocumentDirect could not initialize communications.

**Action:** View the server settings in the Document Servers dialog. Verify that your communication protocol settings are correct. If the problem persists, click **Technical info ...** and record the information displayed. Refer the problem to

## W167E- A communications error has occurred

- Reason:** An error occurred in a communications component of DocumentDirect.
- Action:** View the server settings in the Server Configuration Dialog. Verify that your communication protocol settings are correct. If the problem persists, click on **Technical info ...** and record the information displayed. Refer the problem to your system administrator.

## W168E- Communications could not be terminated

- Reason:** An error occurred in terminating the communication protocol or in a DocumentDirect communication component.
- Action:** Exit and restart DocumentDirect and retry your actions. It may be necessary to restart Windows to properly reinitialize the communications protocol. If the problem persists, click on **Technical info ...** and record the information displayed. Refer the problem to your system administrator.

## W170E- The specified override procedure name was not found.

- Reason:** The HLLAPI procedure name specified for document server communications could not be located.
- Action:** View the document server settings in the Document Servers dialog. Verify that your communication protocol settings are correct. If the problem persists, click **Technical info ...** and record the information displayed. Refer the problem to your system administrator.

## W171E- Your CPI-C software must be running before you connect to a server

- Reason:** You have not started WINAPPC, or CPI-C communications could not be initialized.
- Action:** Refer to the Novell NetWare LU6.2 for Windows documentation for information on starting WINAPPC, or check your communication protocol settings. If the problem persists, click on **Technical info...** and record the information displayed. Refer the problem to your system administrator.

## W172E- Operation canceled at user request

- Reason:** You requested that the operation be canceled.
- Action:** None.

## W173E- Unknown token xxx in model filename

- Where:** xxx      An invalid substitutable substring in the Archive Model File Name field.
- Reason:** The archive cannot be created because the Archive Model File Name field contains an invalid substitutable substring.
- Action:** Refer to the *ViewDirect for Networks User's Guide* for a list of valid substitutable substrings. Use Database Maintenance to fix the Archive Model File Name field of the Report record in question.

## **W174E- An I/O error occurred while writing to archive**

**Reason:** The archive cannot be created because Archive Creator was unable to complete a write process. This is normally due to a disk-full condition or a disk error. For network-mounted volumes, this could indicate a network error.

**Action:** Ask your system administrator to examine the disk or network volume.

## **W175E- The requested report has no available pages**

**Reason:** No pages were found in the report that the recipient is allowed to view.

**Action:** Verify that the recipient has access to at least one section in the selected report version.

## **W177E- Unable to locate annotation object handle**

**Reason:** DocumentDirect was prevented from completely writing annotation data to the database. This can occur if the computer locks up or is rebooted while you are saving annotations. The annotations for the report page are no longer accessible.

**Action:** The system administrator should restore a backup copy of the database in which the problem does not occur. If no backup copy is available, the problem must be corrected by manually deleting the annotation data for the page and recreating the annotations.

Annotation data for the page can be manually deleted using tools provided by the database vendor.

## **W178E- Internal annotation resource allocation error**

**Reason:** An error occurred allocating memory or other resources while processing an annotation request.

**Action:** Close applications that are not required for the operation of DocumentDirect. If the problem persists, exit DocumentDirect, restart your PC, then restart DocumentDirect.

## **W179W- Annotation database currently being read or written. Try again later**

**Reason:** You attempted to save or display the annotations for a report page that another user is currently accessing.

**Action:** Retry the operation a few seconds later. If the problem persists, it may be because a ReadWrite lock was not released. Contact your system administrator to determine if the lock should be removed.

## **W180W- Annotations for this page are being edited elsewhere. Try again later**

**Reason:** You attempted to edit annotations for a report page that is currently being edited by another user. Only one user at a time can edit the annotations on a given report page.

**Action:** Retry the operation later. If the problem persists, it may be because an Update lock was not released. Contact your system administrator to determine if the lock should be removed.

**W181E- Syntax Error - Unexpected end of list. There must be xxx items.**

- Where:**      xxx              Expected number of items.
- Reason:**    The script does not contain the expected number of items.
- Action:**      Edit the script file and do one of the following:
- Change the 'count' parameter to match the actual number of items listed.
  - Add or delete items so the total number of items matches the value of the 'count' parameter.

**W182E- Line X in file Y contains duplicate value ZZ**

- Where:**      X                  Line on which the error occurred
- Y                  Name of the file containing the error
- ZZ                Duplicate value
- Reason:**    The ANSI/EBCDIC translation table contains more than one value for a single character mapping.
- Action:**      Verify that all character mappings in the translation table are unique.

**W183E- Translation table X does not provide a 1:1 mapping.**

- Where:**      X                  Name of the file containing the error
- Reason:**    The translation table contains fewer than 256 character mappings.
- Action:**      Ensure that the translation table contains a corresponding EBCDIC character for each of the 256 ANSI characters.

**W184E- Syntax error: line X, file Y**

- Where:**      X                  Line on which the error occurred
- Y                  Name of the file containing the error
- Reason:**    The syntax on line X is incorrect.
- Action:**      Verify the line syntax by following the national language support guidelines.

**W186W- Rotate image to xxx degrees before displaying or editing annotations.**

- Where:**      xxx              The rotation selected when the annotations were attached.
- Reason:**    The current rotation of the image is different than when the annotations were attached.
- Action:**      Set the rotation to xxx degrees.

**W187E- Annotation lock is missing.**

- Reason:**    DocumentDirect cannot find a required lock in the database. A system administrator may have manually deleted the lock.

**Action:** Select **OK**. DocumentDirect ends the requested action. If this error occurs while closing a window, selecting OK closes the window and discards any annotation changes.

## **W188E- Only one instance of this application is permitted.**

**Reason:** You attempted to start a program that is already running. You can run only one copy of the program at a time.

**Action:** Use the copy of the program that is already running. If it is busy, wait for it to complete processing.

## **W189E- Invalid Document Server Name, xxx.**

**Where:** xxx Document server name

**Reason:** One of the following:

1. The document server is not configured for use with DocumentDirect.
2. If this message appears while you are configuring a document server, the document server name contains invalid characters.

**Action:** **For reason 1:** Verify the spelling of the document server name with the server names defined in the Document Servers dialog.

**For reason 2:** Ensure that all characters in the document server name are valid. All characters, except "[" and "]", are valid.

## **W190E- File xxx, is not a Document Archive File.**

**Where:** xxx Filename

**Reason:** The OPENVIEW script command is unable to open the specified document archive file. The file specified in the reportid parameter is either not in a document archive file format or may be corrupted.

**Action:** 1. Verify that the file specified in the reportid parameter is a document archive file. If not, modify the OPENVIEW script command so that it specifies a document archive file and retry the script.

2. Use Document Explorer to open the document archive file. If you can view the file, the file is not corrupt. Check the script command for syntax accuracy. If you can't view the document archive file, it is corrupt and you must recreate it.

## **W192I- Your database is already up to date.**

**Reason:** The version of the database is compatible with your release of ViewDirect for Networks and/or DocumentDirect.

**Action:** You do not have to run Database Conversion. Exit the Database Conversion program.

## **W196E- The file xxx already exists and is read-only**

**Where:** xxx Filename.

**Reason:** The filename created, using the Archive Model File Name, is an existing,



read-only file.

**Action:** Remove the read-only attribute and restart Archive Creator.

**W197E- The filename of xxx is not unique.**

**Where:** xxx              Filename.

**Reason:** A unique filename was created using the Archive Model File Name. However, before this process completed, another process created a file with the same name.

**Action:** Restart Archive Creator. If the problem persists, do one of the following:

- Delete or rename the file created with the same name.
- Remove the %Unique% filename requirement.
- Change the Archive Model File Name.

**W198E- The new password has not been confirmed properly.**

**Reason:** The password you entered in the Confirm New Password field did not match the entry in the New Password field.

**Action:** Re-enter the confirmation password. If the message reappears, re-enter the new password.

**W199E- Editing annotations is not allowed when database is read-only.**

**Reason:** Edited annotations cannot be stored in the database when the database permissions are read-only.

**Action:** Ask your database administrator to change the annotations database permissions to read-write.

**W200E- The image is too large to be copied to the clipboard.**

**Reason:** The image is too large to be copied to the Clipboard using the selected output quality.

**Action:** Before copying the image to the Clipboard, do one of the following:

- Reduce the size of the displayed image.
- Reduce the output quality of the image.
- Ensure that the Include Annotations box is *not* checked on the Copy To Clipboard dialog.
- Decrease the number of colors of your display by using the Windows Control Panel.

**W201W- Not able to find INI file 'xxx'**

**Where:** xxx              Name of INI file that DocumentDirect is attempting to use

**Reason:** The specified file was not found.

**Action:** Check to make sure the file exists.

## **W202E- DocumentDirect is busy. Try again later.**

**Reason:** DocumentDirect received a request to run a script while it is running another script. DocumentDirect must finish running the current script before it can start another.

**Action:** Reissue the request when DocumentDirect completes the current script.

## **W204E- Unable to open log file: xxx**

**Where:** xxx Path and filename of log file.

**Reason:** Archive Creator cannot locate the file.

**Action:** Verify the following:

- The path entered in the Processing Options dialog is valid.
- You have write access to the path.

## **W205E- Unable to write log file: xxx**

**Where:** xxx Path and filename of log file.

**Reason:** Typically, this message is generated because:

1. There is insufficient free space on the specified disk.
2. You do not have access to the specified directory.

**Action:** **For reason 1:** Free some disk space or use the Archive Creator Processing Options dialog to change the location of the log files.

**For reason 2:** Verify that you have access to the specified directory.

## **W206E- Unable to create exception file: xxx**

**Where:** xxx Path and filename of the file used to store pages of the report input file when the Report ID could not be identified.

**Reason:** Archive Creator cannot create the file.

**Action:** Verify that the path entered in the Processing Options dialog is valid.

## **W207E- Version mismatch: requested xxx, found yyy.**

**Where:** xxx Version ID requested by the user

yyy Version ID in the located document archive file

**Reason:** e-Search & View located the file that should have contained the requested report version. However, the file contained pages from a different version of the report. This can happen for one of the following reasons:

- The ViewDirect for Networks Database Maintenance client was used to incorrectly update the database. For example, in the Report Version table, an incorrect document archive filename was entered for the specified report

version.

- The document archive file for the requested report version was replaced with a document archive file for a different version of the report.

**Action:** Use the Database Maintenance client to correct the error or replace the incorrect document archive file with the correct file.

**W208E- Report name mismatch: requested xxx, found yyy.**

**Where:** xxx Report requested by the user  
yyy Report in the located document archive file

**Reason:** e-Search & View located the file that should have contained the requested report version. However, the file contained pages from a different report. This can happen for one of the following reasons:

- The ViewDirect for Networks Database Maintenance client was used to incorrectly update the database. For example, in the Report Version table, an incorrect document archive filename was entered for the specified report version.
- The document archive file for the requested report version was replaced with a document archive file for a different report.

**Action:** Use the Database Maintenance client to correct the error or replace the incorrect document archive file with the correct file.

**W215E- This server does not support password maintenance.**

**Reason:** The Password Maintenance function cannot be used to change your password on the document server either because the system administrator turned off the Password Maintenance function on a ViewDirect for MVS document server, or the function is not supported on the server you are using. The Password Maintenance function is not supported on the following document servers:

- ViewDirect for Networks
- INFOPAC-RDS for Networks
- INFOPAC-RDS for MVS 5.2 and earlier

**Action:** Change your password using whatever other password maintenance utilities are available. If you need assistance, ask your system administrator to change your password on the document server or to turn on the Password Maintenance function on the ViewDirect for MVS document server.

**W216W- Directory xxx does not exist. Would you like to create it?**

**Where:** xxx Specified directory.

**Reason:** The directory that you specified does not exist.

**Action:** One of the following:

- If you want to create this directory, click **Yes**.

- If you do not want to create the directory, but want the directory specified in the RDSWIN.INI file, click **No**.
- If you want to cancel the request, click **Cancel**.

**W217E- Unable to create directory xxx.**

**Where:** xxx Specified directory.

**Reason:** You attempted to create a directory on a drive for which you do not have write access.

**Action:** Specify a different drive for the directory.

**W218E- Database update rejected: data xxx is not valid for field yyy**

**Where:** xxx Value entered.

yyy Field in which an invalid value was entered.

**Reason:** An invalid value was entered in the specified field.

**Action:** Correct the value and retry.

**W219E- External system error.**

**Reason:** An error occurred in a module that is external to DocumentDirect, such as a Windows system DLL.

**Action:** Retry the operation. If the problem persists, contact your system administrator.

**W220E- Unable to create Importer log file**

**Reason:** Typically, this message is generated for one of the following reasons:

1. There is insufficient free space in your Windows directory.
2. An existing RDSIMPRT.LOG file is set to read-only and cannot be deleted.

**Action:** **For reason 1:** Free some disk space in your Windows directory.

**For reason 2:** Open the Properties dialog for the RDSIMPRT.LOG file and de-select the read-only attribute.

**W221E- Error writing to Importer log file**

**Reason:** Typically, this message is generated if there is insufficient free space in your Windows directory.

**Action:** Free some disk space in your Windows directory.

**W223E- Invalid value for Section: xxx, key: yyy in INI file zzz**

**Where:** xxx Section name

yyy Key name

zzz Path/filename of INI file

**Reason:** Specified key has an invalid value.

**Action:** Edit the INI file and change the value of the key to a valid one. Contact your system administrator for valid values.

**W224E- Error reading Section: xxx, Key: yyy in INI file zzz**

**Where:**      xxx              Section name  
                 yyy              Key name  
                 zzz              Path/filename of INI file

**Reason:** Either the specified key does not exist or a value was not assigned to it.

**Action:** Edit the INI file and insert the key and value or only a value if the key already exists. Contact your system administrator for valid keys and values.

**W225E- Sub-page number must be numeric and non-zero**

**Reason:** The value in the Sub-page field in the GoTo dialog is not valid.

**Action:** Change the entry in the Sub-page field to a non-zero number.

**W226E- Maximum value reached for key field: "xxx".**

**Where:**      xxx              Name of the field that has reached its maximum value.

**Reason:** The database field specified has reached the maximum number of unique values allowed.

**Action:** Contact Mobius Customer Support for assistance with compacting the database.

**W227E- Unable to obtain lock on xxx "yyy".**

**Where:**      xxx              Field type that could not be locked.  
                 yyy              Pre-existing lock information.

**Reason:** A lock was already in use on the specified information and could not be granted.

**Action:** Try again later. If the problem persists, contact your database administrator.

**W231E- Error removing annotations. No annotations found in database.**

**Reason:** You attempted to delete annotations that no longer exist.

**Action:** Refresh the list of annotations.

**W233E- Unable to add xxx, specified yyy zzz not found.**

**Where:**      xxx              Record type that could not be added.  
                 yyy              Missing record.  
                 zzz              The information contained in the record you attempted to add.

**Reason:** The record yyy must already exist and also contain zzz before you can add xxx.

**Action:** Add the missing prerequisite record to the appropriate table, then attempt to add xxx again.

**W235E- Either enter a table file name or select Use Default SBCS Translation Table.**

- Reason:** **Override SBCS Translation Table** is selected on the Text Viewing tab of the Preferences dialog but no translation table filename is entered in the table name field.
- Action:** Either enter a translation table filename in the field below the **Override SBCS Translation Table** radio button or select **Use Default SBCS Translation Table**.

**W236I- Database successfully converted from 1.4 to 1.5**

- Reason:** Database conversion is complete.
- Action:** None. Informational.

**W237E- Unable to update, xxx 'yyy' does not exist**

- Where:** xxx Field in which an invalid value was entered.  
yyy Value entered.
- Reason:** You attempted to update a record, but that record references a device or distribution group that does not exist. The update failed.
- Action:** Do either of the following:
- Correct the value for the specified field and retry.
  - Add the referenced device or distribution group to the database.

**W238E- Invalid input, field xxx cannot be empty.**

- Where:** xxx Required field.
- Reason:** The required field is blank.
- Action:** Enter a value in the required field and retry.

**W239E- Prior Database Conversion did not complete - restore 1.4 backup, then retry.**

- Reason:** A previous Database Conversion attempt did not complete successfully.
- Action:** Ensure that the reason for the failure of the prior conversion attempt has been addressed. Then restore the unconverted 1.4 database backup and retry Database Conversion.

**W240E- Data Access Object (DAO) support is required to convert the database**

- Reason:** Microsoft Data Access Object (DAO) support must be installed on the workstation.
- Action:** Install DAO support. During DocumentDirect installation, DAO support files were copied to the DBENGINE\DAOINST subdirectory of your product directory. To install DAO support, use Windows Explorer to execute the DAOINST.BAT file in that subdirectory. For example:

After DAO support is installed, retry Database Conversion.

**W241E- Cannot convert data source 'xxxx' because it is read-only**

**Where:** xxxx Name of Microsoft Access data source that cannot be converted.

**Reason:** A data source cannot be converted if it is a read-only file.

**Action:** Open the Properties dialog for the specified file and de-select the read-only attribute.

**W242E- Template 'xxx' has an internal error.**

**Where** xxx Path and filename of the template used by HLLAPIVIEWER.EXE.

**Reason:** The template script file has an internal error and cannot be processed.

**Action:** Check the syntax of commands used in the template script file. Note that any variables must be enclosed by percent signs (for example, %SERVERID%).

**W248E- You have made changes to the configuration. Discard the changes?**

**Reason:** You made changes to the configuration that are not yet saved.

**Action:** Do one of the following:

- If you want to save the changes, click **No**, and then save the changes.
- If you do not want to save changes, click **Yes**.

**W249E- Unable to add record into the xxx because the resource is locked by another transaction. Please try again later.**

**Where:** xxx Name and type of resource.

**Reason:** You are attempting to add a record to a table that is being used by another database transaction. The table or the database is locked.

**Action:** Re-issue the request later.

**W250E- Unable to update record in the xxx because the record is locked by another transaction. Please try again later.**

**Where:** xxx Name and type of resource.

**Reason:** You are attempting to update a record, but the record is being used by another database transaction. The record is locked.

**Action:** Re-issue the request later.

**W252W- xxx files are not associated with yyy.**

**Do you want an association for these files?**  
**Always perform this check on startup**

**Where:** xxx File extension.

yyy                      Application name.

**Reason:**      You ran an application that checks whether file types are properly associated with it and the application found an incorrectly associated file type.

**Action:**        To associate the file extension with an application, click **Yes**. To initiate no action and let the file extension remain without an associated application, click **No**. If you do not want the application to check for associations again, clear the check box next to **Always perform this check on startup**.

**W255I- The customized user message is invalid.**

**Reason:**      You entered fewer than four characters or you entered a space in the message ID on the User Message Configuration dialog.

**Action:**        Enter the first four characters of the message ID whose text you wish to customize.

**W256I- The text for the customized user message is missing.**

**Reason:**      You did not enter any text in the User Message Text field of the User Message Configuration dialog.

**Action:**        Enter your customized message in the User Message Text field of the User Message Configuration dialog.

**W257I- The customized user message is already customized.**

**Reason:**      A customized user message already exists for the message ID number you entered in the User Message Configuration dialog.

**Action:**        To customize a different user message, enter a different message ID number in the User Message Configuration dialog. To edit the text of the previously customized user message, click **Edit** on the User Messages tab of the DocumentDirect for the Internet Configuration dialog.

---

## ***Technical Information for Error Messages***

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Technical information messages consist of brief descriptive text followed by information that details the cause of the problem and the location where that problem was detected.

These messages have the following format:

|                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------|
| Problem ppp, Severity sss, TechInfo 'ttt', ProgName 'nnn', ProgLabel 'lll',<br>CallerName 'ccc', CallerLabel 'zzz' |
|--------------------------------------------------------------------------------------------------------------------|

where:



| Message | Means...                                                                                                                                                                                                                             |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ppp     | Problem code, which is a numeric value between 1 and 999.                                                                                                                                                                            |
| sss     | Severity level indicating how serious the problem is. Values are: <ul style="list-style-type: none"> <li>• 0 Informational</li> <li>• 4 Warning</li> <li>• 8 Exception</li> <li>• 12 Error</li> <li>• 16 Disaster</li> </ul>         |
| ttt     | Error code from an external system. The format and value of this field vary according to the system that detected or caused the error. This field may be blank. For further information on external system error formats, see below. |
| nnn     | Name of the program in which the error was detected.                                                                                                                                                                                 |
| lll     | Location within the program at which the error occurred.                                                                                                                                                                             |
| ccc     | Name of the program that called the program that detected the error.                                                                                                                                                                 |
| zzz     | Location in the calling program at which the called program was invoked.                                                                                                                                                             |

The following external system error code formats are supported:

- Status=aa, Info=bccccdddd, where

| Message | Means...        |
|---------|-----------------|
| aa      | Status code     |
| b       | Error type code |
| cccc    | Error code 1    |
| dddd    | Error code 2    |

For an explanation of these codes, see Appendix B of the *ViewDirect for MVS User's Guide*.

- SQLSTATE=ccsss, where

| Message | Means...                                                                                               |
|---------|--------------------------------------------------------------------------------------------------------|
| cc      | Class code, which is an alphanumeric value indicating the general category to which the error belongs. |

| Message | Means...                                                                                   |
|---------|--------------------------------------------------------------------------------------------|
| sss     | Subclass code, which is an alphanumeric value indicating the specific nature of the error. |

For an explanation of these codes, see Appendix A of the *ODBC SDK Programmer's Reference - MSDN Library*.

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## Appendix C. Customization

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### Introduction

This appendix provides information on customizing DocumentDirect to your environment. It discusses the following:

- Configuring DocumentDirect
- Configuring Communications
- Configuring LPFD
- Carriage Controls in Downloaded Reports
- Opening Documents from a 3270 Terminal Emulator Session
- Creating Custom Configurations
- Configuring Systems for Web-based Distribution
- Using Command Line Parameters
- Customizing INI Files and Registry Settings

**Note:** All information and instructions in this appendix apply to both DocumentDirect and DocumentDirect Application Suite except where specifically noted.

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CPIC: Customization

CPIC: Product-Specific Parameters

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## Chapter C1. Configuring DocumentDirect

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DocumentDirect can be customized to meet your needs. Information in this chapter is intended to help you configure DocumentDirect.

### ***Setting User Preferences***

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This section describes how to set user preferences in each of the following areas:

- Security and Administrative Options – maximum number of reusable sessions, time-out, password, and logging error messages
- Text Viewing Options – default fonts, DBCS text output, and ANSI-to-EBCDIC translation
- LPFD Viewing Options – resolution mode, gray scaling level, and caching of resources
- Image Viewing Options – initial size and orientation of image documents
- Windowing Options – window sizing and toolbar display
- Annotations Options – default fonts and display options for annotations
- External Viewers – types of files to be viewed using Windows applications
- Policy Options – working directory for policy files and presentation of Field Settings dialog
- Miscellaneous Options – Document Explorer drives, history list, default paths, and option for background printing

## Security and Administrative Options

This section discusses each of the following security and administrative options:

- Setting Reusable Session Count – affects performance and resources by specifying the maximum number of sessions to remain open after an archive is closed.
- Enabling Time-Out – DocumentDirect releases all sessions and closes when it is not used for a specified period of time.
- Saving Passwords – users can access previously connected document servers without being prompted again for their passwords.
- Specifying Types of Messages to Log – what kinds of messages, e.g., informational, warning, error, etc., are logged to the client and server message files.

Each of the options is controlled by selections on the following dialog, which is displayed by selecting **Options|Preferences**.

The screenshot shows the 'Preferences' dialog box with the 'Security and Administrative' tab selected. The dialog has a title bar 'Preferences' and four tabs: 'Security and Administrative', 'Text Viewing', 'LPFD Viewing', 'Image Viewing', and 'Windowing'. The 'Security and Administrative' tab contains the following settings:

- Sessions:** A group box containing 'Reusable session count' with a numeric spinner set to 0.
- Time-Out:** A group box containing two options: 'Time-Out After' with a numeric spinner set to 10 and the unit 'minutes', and 'Enable Time-Out Dialog' which is checked.
- Passwords:** A group box containing 'Save Encrypted Passwords' which is unchecked.
- Trace Thresholds:** A group box containing two dropdown menus: 'Server Trace Level' set to 'None' and 'Client Trace Level' set to 'All'.

At the bottom of the dialog are three buttons: 'OK', 'Cancel', and 'Help'.

Figure C-1. The Preferences Dialog, with Security and Administrative Options

### Setting Reusable Session Count

DocumentDirect lets you specify the number of sessions to remain open after an archive is closed. Only administrators should change this setting; we recommend that you use the default value.

Specifying a high number of reusable sessions improves DocumentDirect performance by reducing the number of session connect/disconnect requests, because sessions that are reused do not need to be connected or disconnected. Specifying a low number conserves document server resources.

The optimal value for Reusable Session Count (C) is approximately the number of sessions the document server can support (S) divided by the expected number of concurrent users (U), minus the expected number of concurrently open documents (D):

$$C = (S/U) - D$$

where S is one of the following:

- If using a ViewDirect for MVS document server, the number of sessions a document server can support is either the IIT size (i.e., 1000, unless you have obtained a larger IIT from Customer Support) or the server's session limit (i.e., MAXSESS in VTAMAPPL, MAXTASK in CICS), whichever is less.
- If using a ViewDirect for Networks document server, the number of sessions a document server can support is the number of database connections that are available. This number may be reduced if other applications use the same database. For details on database connection limits, refer to the documentation for your specific database.

To specify the number of reusable sessions, perform the following steps:

1. Select **Options|Preferences** to display the Preferences dialog with Security and Administrative options shown in Figure C-1.
2. Specify the Reusable session count.
3. Click **OK**.

### Enabling Time-Out

DocumentDirect provides a time-out feature that monitors system activity and causes DocumentDirect to release all sessions and close when it is not used for a specified period of time – called the time-out interval. The time-out interval provides the following benefits:

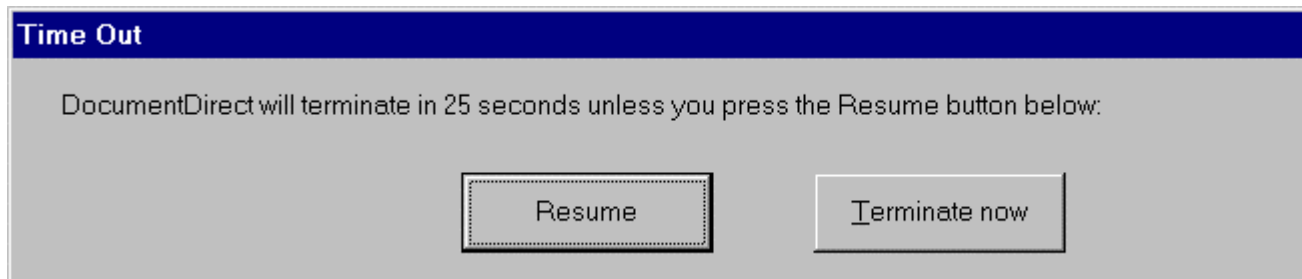
- Maintains document and document server security
- Frees document server sessions and system resources

Time-out occurs if none of the following happens during the time-out interval:

- DocumentDirect receives no keyboard or mouse input.
- No server transactions are requested.
- No DocumentDirect scripts are running in unattended mode.
- No DocumentDirect dialogs are opened.

To enable the time-out feature, perform the following steps:

1. Select **Options|Preferences** to display the Preferences dialog with Security and Administrative options shown in Figure C-1.
2. Select **Time-Out After**.
3. Specify the time-out interval in minutes.
4. Click **Enable Time Out** dialog if you want DocumentDirect to warn the user of an impending time-out by displaying the following dialog  
30 seconds before time-out is to occur:



The above dialog warns the user of the impending time-out and gives the user the opportunity to click **Resume** to prevent the time-out and return to DocumentDirect.

**Note:** If the user is working in another application when the above message is issued, the **Time Out** dialog is displayed in the foreground.

5. Click **OK**.

### *Saving Passwords*

You can choose to save passwords in encrypted format for each document server. DocumentDirect saves passwords in the RDSWIN.INI file. Choosing not to save passwords disables the Password field and the Prompt for Password check box on both the New Document Server and Edit Document Server dialogs.

To specify whether to save encrypted passwords, perform the following steps:

1. Select **Options|Preferences** to display the Preferences dialog with Security and Administrative options shown in Figure C-1.
2. Select or deselect **Save Encrypted Passwords** depending on whether you want to

save passwords.

3. Click **OK**.

### *Specifying Types of Messages to Log*

Mobius Product Support uses the information in DocumentDirect's RDSWIN.MSG file and the document server's message file to help resolve problems. By default, only messages whose 5-character message identifier ends in D, that is, Disaster, are logged in these files.

To specify what types of messages are logged to the document server's message file, perform the following steps:

1. Select **Options|Preferences** to display the Preferences dialog with the Security and Administrative options shown in Figure C-1.
2. Select the desired Server and Client Trace levels from one of the choices listed in the table below and click **OK**. Note that using a Trace Level other than None can generate a large amount of output that may affect system performance.

| Trace Level          | Type of Messages Logged                                         |
|----------------------|-----------------------------------------------------------------|
| All                  | Informational, warning, exception, error, and disaster messages |
| Warnings and above   | Warning, exception, error, and disaster messages                |
| Exceptions and above | Exception, error, and disaster messages                         |
| Errors and above     | Error and disaster messages                                     |
| None                 | Disaster messages only (default)                                |

### **Text Viewing Options**

DocumentDirect lets you control viewing options, such as the default font used to display text documents and the translation table used to convert EBCDIC data to ANSI data.

To set viewing options, perform the following steps:

1. Select Options|Preferences.
2. Click **Text Viewing**. The dialog shown in Figure C-2 is displayed.



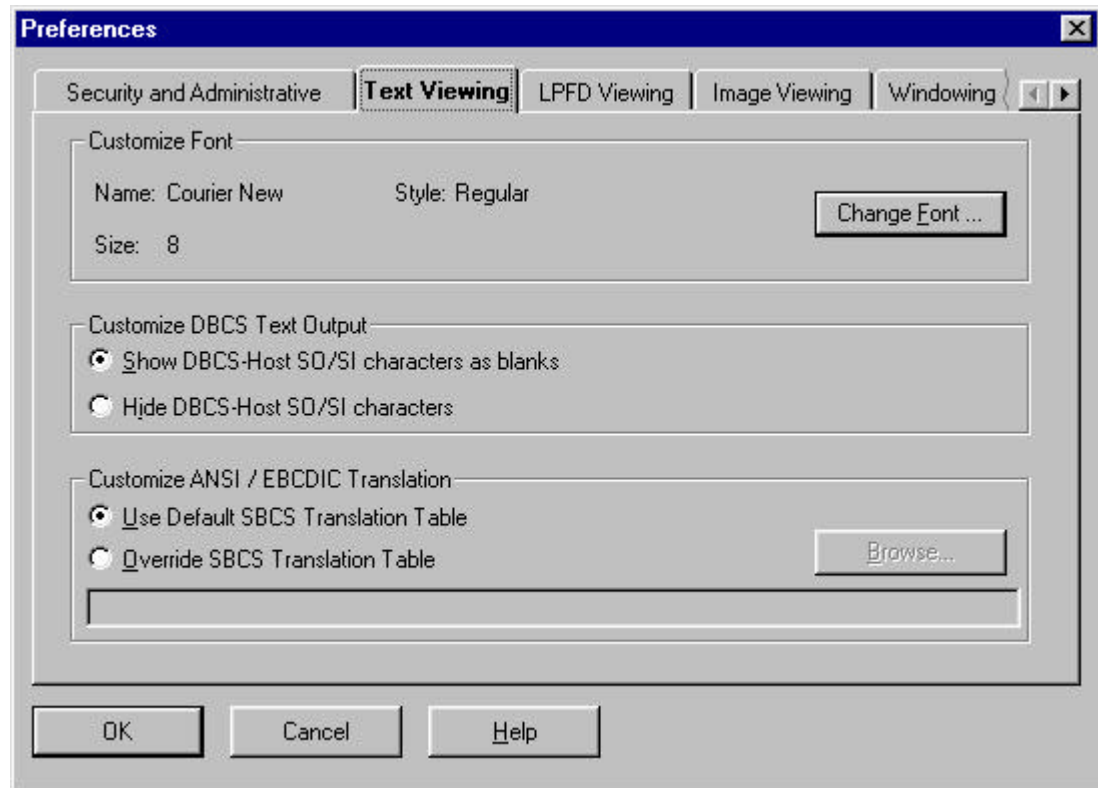


Figure C-2. The Preferences Dialog, with Text Viewing Options

3. Select the desired options and click **OK**. Each option is explained below.

| Option                                    | Description                                                                                                                                                                                                                               |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Customize Font                            | Changes the default font used for viewing text documents.<br>Selecting <b>Change Font...</b> displays the Font dialog.                                                                                                                    |
| Show DBCS-Host SO/SI characters as blanks | Displays DBCS-Host shift-in and shift-out characters as blanks in documents formatted to use shift-in and shift-out characters as place holders.<br><br>This option does not affect the display of SBCS (single-byte character set) text. |

| Option                             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hide DBCS-Host SO/SI characters    | <p>Hides DBCS-Host shift-in and shift-out characters in documents formatted to ignore shift-in and shift-out characters.</p> <p>This option does not affect the display of the following:</p> <ul style="list-style-type: none"> <li>• The Document Explorer window, which always displays DBCS-Host shift-in and shift-out characters as blanks</li> <li>• SBCS (single-byte character set) text</li> </ul>                                                                                                                                    |
| Use Default SBCS Translation Table | <p>Uses the default SBCS EBCDIC to ANSI translation table based on the code page used by the document server. Choose this selection for all supported languages.</p>                                                                                                                                                                                                                                                                                                                                                                            |
| Override SBCS Translation Table    | <p>Allows the user to specify a file containing a customized SBCS translation table. DocumentDirect uses the specified file to convert all data to and from a document server.</p> <p>Select this option only when a customized translation table is required. For example, if you want to view documents stored in a language that DocumentDirect does not currently support, you must create a customized translation table as described in "National Language Support" and activate it by overriding the default SBCS translation table.</p> |

## LPFD Viewing Options

Laser Printer Formatted Documents (LPFD) refers to IBM AFP, Xerox DJDE/Metacode, Adobe PostScript, Adobe PDF, or Hewlett-Packard PCL format. The following options can be set for LPFDs:

- High Resolution for LPFD viewing – enhances details when zooming in on images in LPFD encoded documents.
- Gray scaling viewing method – enhances image viewing quality or increases image display speed.

- Caching resources for LPFDs – enhances performance because fonts and forms are downloaded when a document is first opened. When resources are required by another page or archive, the program utilizes cached resources instead of continually downloading from the document server. Directories for caching resources for AFP, DJDE, PostScript, PDF, or PCL document formats are set from this dialog. The default directories are created during installation. If a directory for a resource was not specified or was specified incorrectly, resources are cached to the default directory. If the default directory does not exist, resources are cached to the Windows temporary directory.

To set LPFD options, perform the following steps:

1. Select Options|Preferences.
2. Click **LPFD Viewing**. The dialog shown in Figure C-3 is displayed.

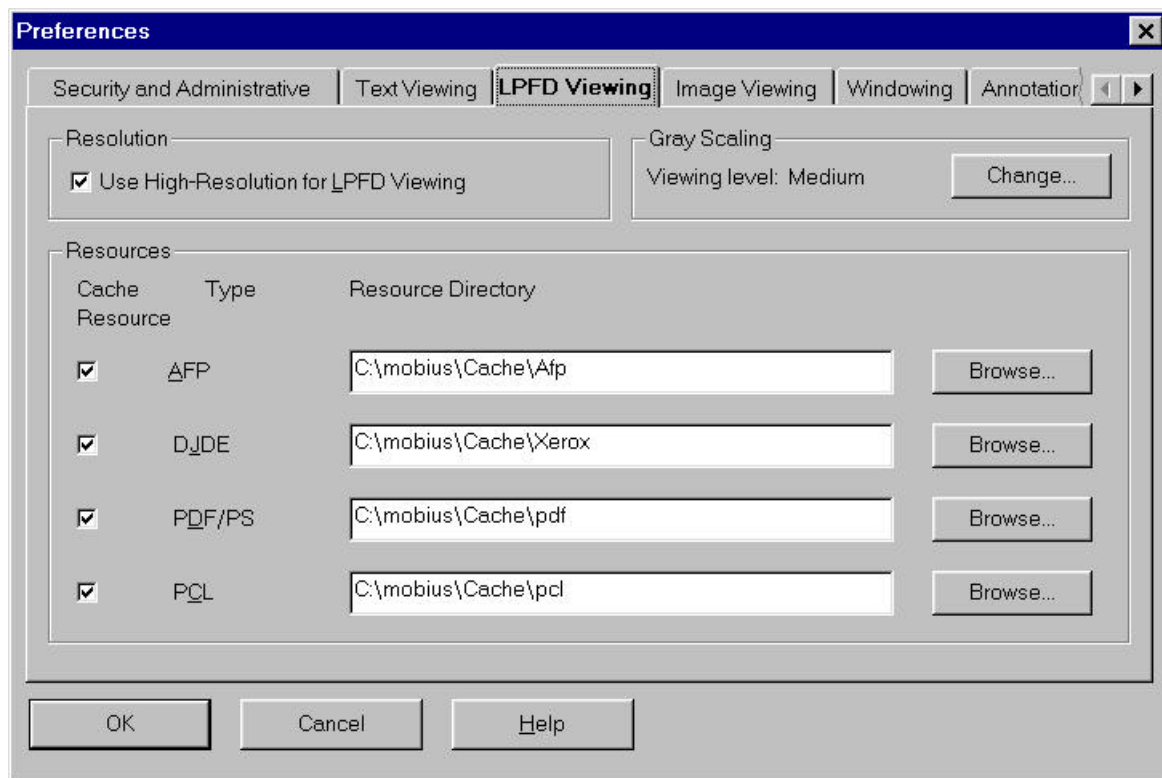


Figure C-3. The Preferences Dialog, with LPFD Viewing Options

3. Select the desired options and click **OK**. Each option is explained below.

| Option                               | Description                                                                                                                                                                             |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Use High Resolution for LPFD Viewing | Enhances details when zooming in on images in LPFD documents.<br><b>Note:</b> This option controls viewing resolution only; printing is done at the resolution provided by the printer. |

| Option             | Description                                                                                                                                                                                                                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gray Scaling       | Indicates the gray scale level to use when displaying an LPFD image. Click <b>Change...</b> to select from None, Medium, or High. Increasing gray scaling improves the quality of the image, but may affect the speed at which the page displays.                                                                              |
| Type               | Indicates the type of report for the corresponding cache resource and resource directory. The LPFD report types are:<br><br>AFP      IBM Advanced Function Printing<br><br>DJDE      Xerox DJDE/Metacode<br><br>PDF/PS   Adobe Portable Document Format or PostScript<br><br>PCL      Hewlett-Packard Printer Control Language |
| Cache Resource     | Specifies whether the resources of a given type are written to the corresponding cache directory. If selected, you must have write access to the cache directory. If not selected, DocumentDirect uses resources already in the cache directory, but does not add resources to that directory.                                 |
| Resource Directory | Full path of the resource directory where resources of the corresponding type are stored.                                                                                                                                                                                                                                      |
| Browse...          | Opens a directory selection dialog, which allows you to select a resource directory by browsing, rather than having to type the full directory path.                                                                                                                                                                           |

## Image Viewing Options

DocumentDirect lets you select the initial size and orientation of image documents.

To set preferences for viewing images, perform the following steps. To view a currently open image document with the options selected, you must close and reopen it.

1. Select **Options|Preferences**.
2. Click **Image Viewing**. The dialog shown in Figure C-4 is displayed.

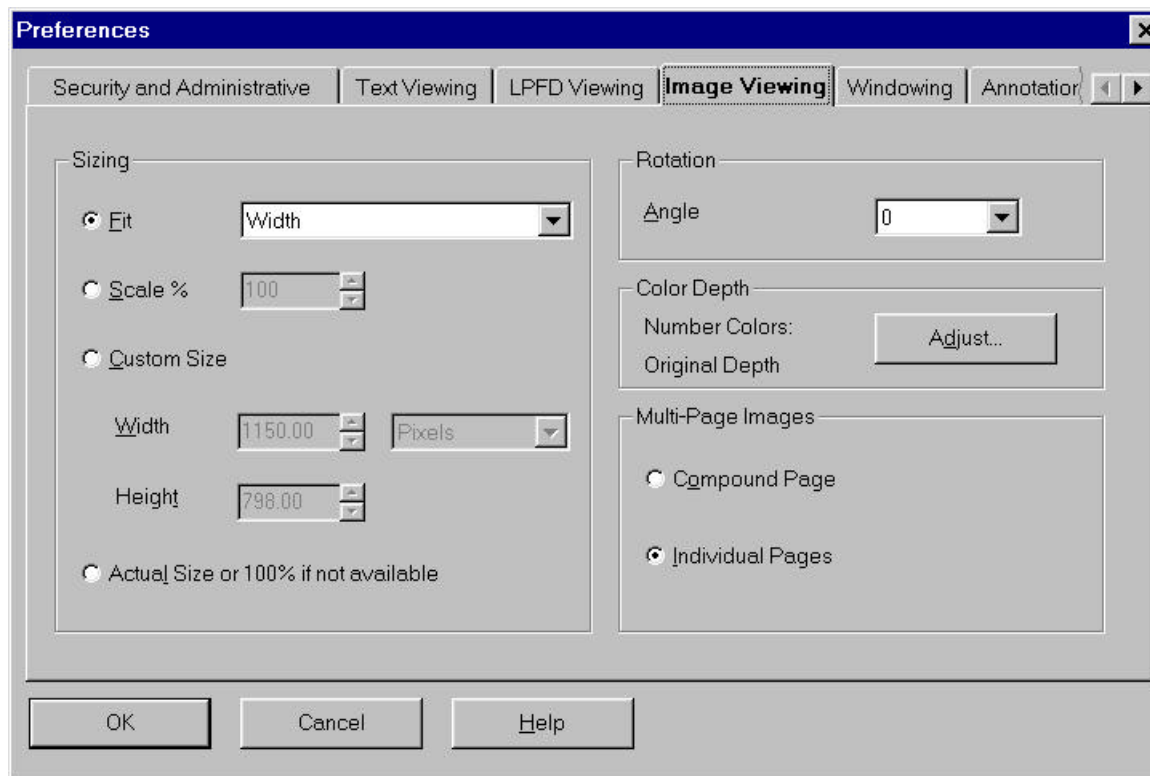


Figure C-4. The Preferences Dialog, with Image Viewing Options

3. Select the desired options and click **OK**. Each option is explained below.

| Option      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fit         | <p><i>Width</i> – Fit the displayed image to the width of your window. If you change the window size, you must re-select this option to ensure correct display.</p> <p><i>Height</i> – Fit the displayed image to the height of your window. If you change the window size, you must re-select this option to ensure correct display.</p> <p><i>On Selected Paper</i> – Fit the image onto the printable area of the paper selected under the <b>File</b> menu <b>Printer Setup</b> option. Printable area size is a function of the selected printer. If you change the paper size or selected printer, you must re-select this option to ensure correct printing.</p> |
| Scale %     | Enlarge or reduce the size of the displayed image by the percentage selected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Custom Size | Dimensions for the displayed image. Dimensions may be specified in inches, millimeters, or pixels.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

| Option                               | Description                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Actual Size or 100% if not available | <p>If the image contains information about its original size, scale the image on the screen to that size. Otherwise, display the image at 100% scaling.</p> <p>For example, a 3-inch by 5-inch check may display at 300 by 500 pixels. Select this option to display the check image as a 3-inch by 5-inch image.</p> <p>If you select the Tile or Truncate Pages option for printing, the image also prints at the original size.</p> |
| Rotation                             | <p>0 – display image in its original orientation.</p> <p>90 – rotate image counter-clockwise 90 degrees from its original orientation.</p> <p>180 – rotate image counter-clockwise 180 degrees from its original orientation.</p> <p>270 – rotate image counter-clockwise 270 degrees from its original orientation.</p>                                                                                                               |
| Color Depth                          | <p>Number of colors to use when displaying an image. Clicking Adjust displays the <b>Color Depth</b> dialog.</p>                                                                                                                                                                                                                                                                                                                       |
| Multi-Page Images                    | <p>Compound Page – All sub-pages of TIF and IOCA multi-page images are displayed and printed as a single page.</p> <p>Individual Pages – Each sub-page of a multi-page image is displayed and printed as an individual page.</p> <p><b>Note:</b> Multi-page AFP documents are always displayed and printed as individual pages, regardless of this setting.</p>                                                                        |

## Windowing Options

DocumentDirect lets you specify display options for each of the following:

- Toolbar – whether to display.
- Report windows and Document Explorer windows – whether to open report windows and DocumentDirect's Document Explorer window as maximized, restored to the size from the previous session, at a default size, or tiled.
- Desktop sizes – whether to retain and reuse the size of the DocumentDirect main window from the previous session.

To select windowing options, perform the following steps:

1. Select **Options|Preferences**.
2. Click **Windowing**. The dialog shown in Figure C-5 is displayed.

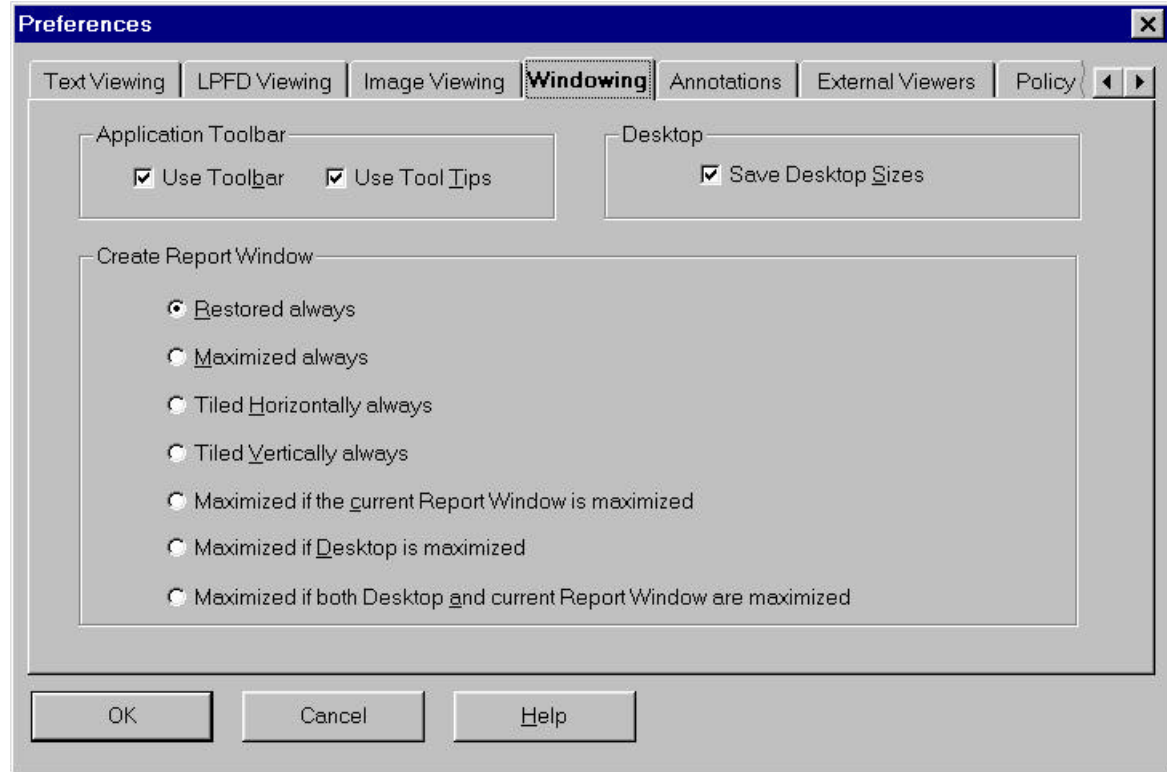


Figure C-5. The Preferences Dialog, with Windowing Options

3. Select the desired options and click **OK**. Each option is explained below.

| Option             | Description                                                                                                                      |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Use Toolbar        | Displays the toolbar.                                                                                                            |
| Use Tool Tips      | Displays text describing the function of each toolbar button when the cursor rests on the button.                                |
| Save Desktop Sizes | Retains and reuses the size of the DocumentDirect main window from the previous session.                                         |
| Restored always    | Opens a report window as restored, meaning that it is an active window that is smaller than maximized and larger than minimized. |
| Maximized always   | Opens a report window as maximized.                                                                                              |

| Option                                                            | Description                                                                                                                                                                                                                              |
|-------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tiled Horizontally always                                         | When a report is opened, all currently open windows are tiled horizontally.                                                                                                                                                              |
| Tiled Vertically always                                           | When a report is opened, all currently open windows are tiled vertically.                                                                                                                                                                |
| Maximized if the current Report Window is maximized               | If the currently active window is maximized, opens the report window as maximized. Otherwise, opens report windows at their default size and DocumentDirect's Document Explorer window as restored.                                      |
| Maximized if Desktop is maximized                                 | If DocumentDirect's main window is maximized, opens the report windows as maximized. Otherwise, opens report windows at their default size and DocumentDirect's Document Explorer window as restored.                                    |
| Maximized if both Desktop and current Report Window are maximized | If both DocumentDirect's main window and the currently active window are maximized, opens the report windows maximized. Otherwise, opens report windows at their default size and DocumentDirect's Document Explorer window as restored. |

## Annotations Options

DocumentDirect lets you set the following annotation options:

- Default font for text annotations
- Whether documents open with annotations automatically displayed
- Whether a paper clip icon appears on the status bar when the current page contains annotations
- Whether a paper clip icon appears next to annotated documents in DocumentDirect's Document Explorer
- Whether the last used annotation tool remains active after it is used
- Whether read-only annotations appear when Edit Annotations is selected

To set any of the annotation options, perform the following steps:

1. Select **Options|Preferences**.
2. Click **Annotations**. The dialog shown in Figure C-6 is displayed.



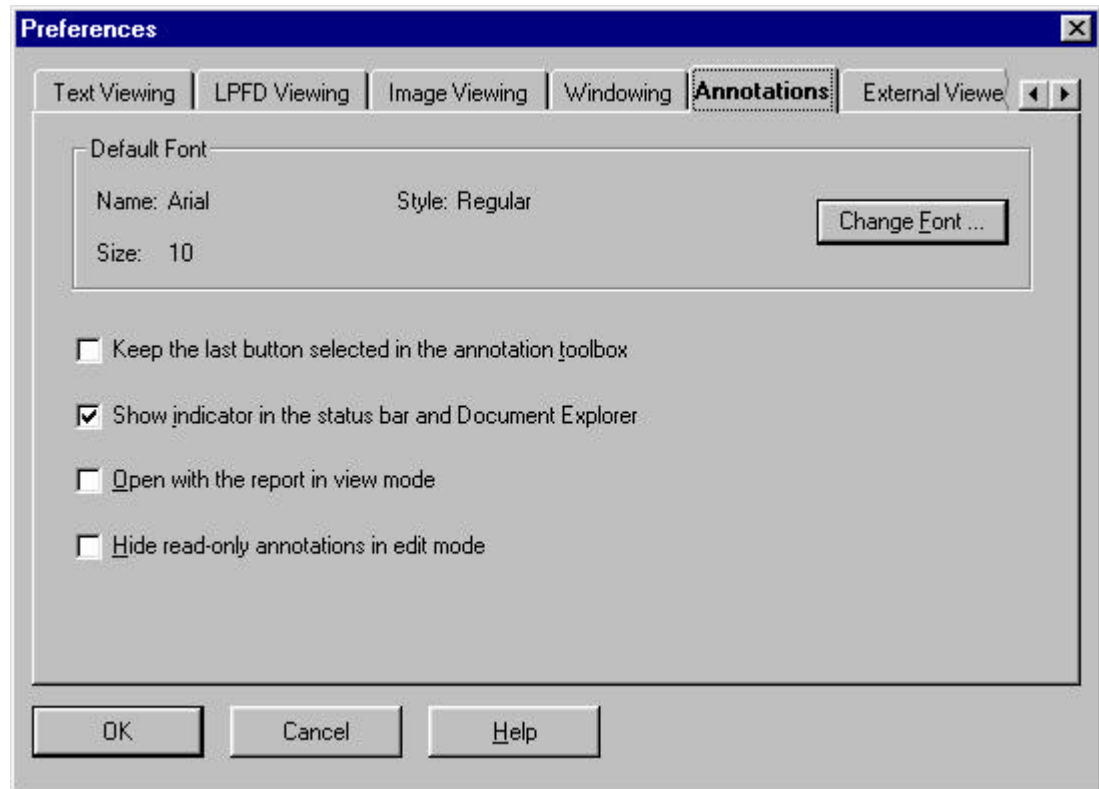


Figure C-6. The Preferences Dialog, with Annotations Options

3. Select the desired options and click **OK**. Each option is explained below.

| Option                                                  | Description                                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Default Font                                            | Default font in text annotations. <b>Change Font...</b> displays the Font dialog, used to select the font, font style, and font size.<br>If you want text to be displayed in annotations when documents are rotated, use True-Type fonts.                                                     |
| Keep the last button selected in the annotation toolbox | Determines whether the last selected tool in the Annotation toolbox remains active after the user finishes creating or editing an annotation.<br>If checked, the last selected tool remains active.<br>If not checked, the last selected tool is deactivated, and the pointer becomes active. |

| Option                                                 | Description                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Show indicator in the status bar and Document Explorer | Displays the paper clip icon: <ul style="list-style-type: none"><li>• On the status bar when the current page contains annotations</li><li>• In DocumentDirect's Document Explorer window next to the Report Version ID, Report Section ID, Topic Report Version ID, or Topic Entry ID that contains annotations</li></ul> |
| Open with the Report in view mode                      | Annotations are displayed automatically when a document is opened.                                                                                                                                                                                                                                                         |
| Hide read-only annotations in edit mode                | Determines whether selecting Edit Annotations from the DocumentDirect toolbar allows the user to view read-only annotations created by other users.                                                                                                                                                                        |

## External Viewers

DocumentDirect lets you specify file types that are to be viewed using viewers that are external to DocumentDirect, that is, Windows applications. DocumentDirect uses Windows file type associations to determine the application to launch when you open a document. Windows applications can only be used as viewers when the Windows file type associations have been established and the applications are available to your workstation. If there is more than one file association for a file type, either DocumentDirect opens and displays the file in the default Windows application that was specified when the associations were established or you can choose an associated Windows application from the context menu.

To set the External Viewers options, perform the following steps:

1. Select **Options|Preferences**.
2. Click **External Viewers** if it is visible; if not, first click the scroll button at the top right of the Preferences dialog to display **External Viewers**. The dialog shown in Figure C-7 is displayed.

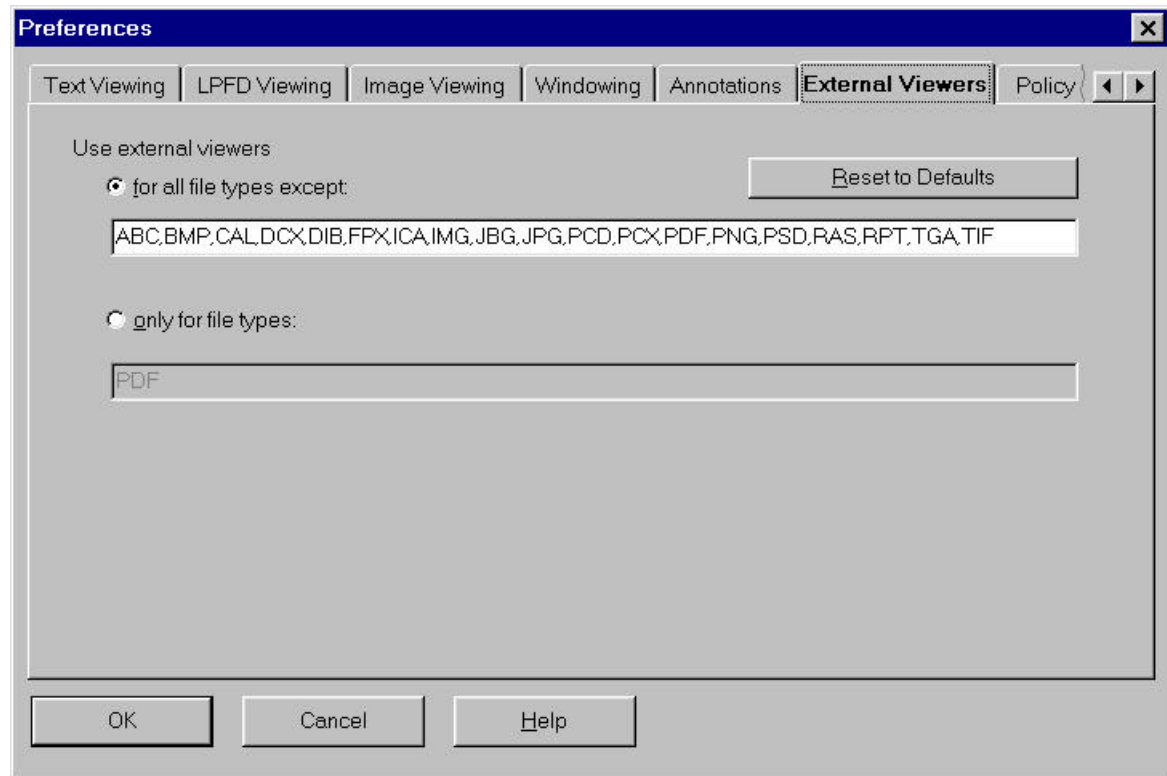


Figure C-7. The Preferences Dialog, with External Viewers Options

3. Select the desired options and click **OK**. Each option is explained below.

| Option                    | Description                                                                                                                                                                                                                                                             |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| for all file types except | Uses DocumentDirect to view only the file types identified by the file extensions you enter. Uses associated Windows applications to view all other file types.                                                                                                         |
| Reset to Defaults         | Restores the file extensions displayed in the <b>for all file types except</b> field to the original setting. The original setting lists file extensions of the file types that DocumentDirect can display. For a complete list of supported file types, see Chapter 2. |
| only for file types       | Uses Windows applications to view only the file types identified by the file extensions you enter. Uses DocumentDirect to view all other file types.                                                                                                                    |

## Policy Options

DocumentDirect lets you specify the following policy options:

- Working Directory – the default directory where policies are stored.
- Field Settings Dialog Style – the presentation setting of the Field Settings dialog.

To select policy options, perform the following steps:

1. Select **Options|Preferences**.
2. Click **Policy**. The dialog shown in Figure C-8 is displayed.

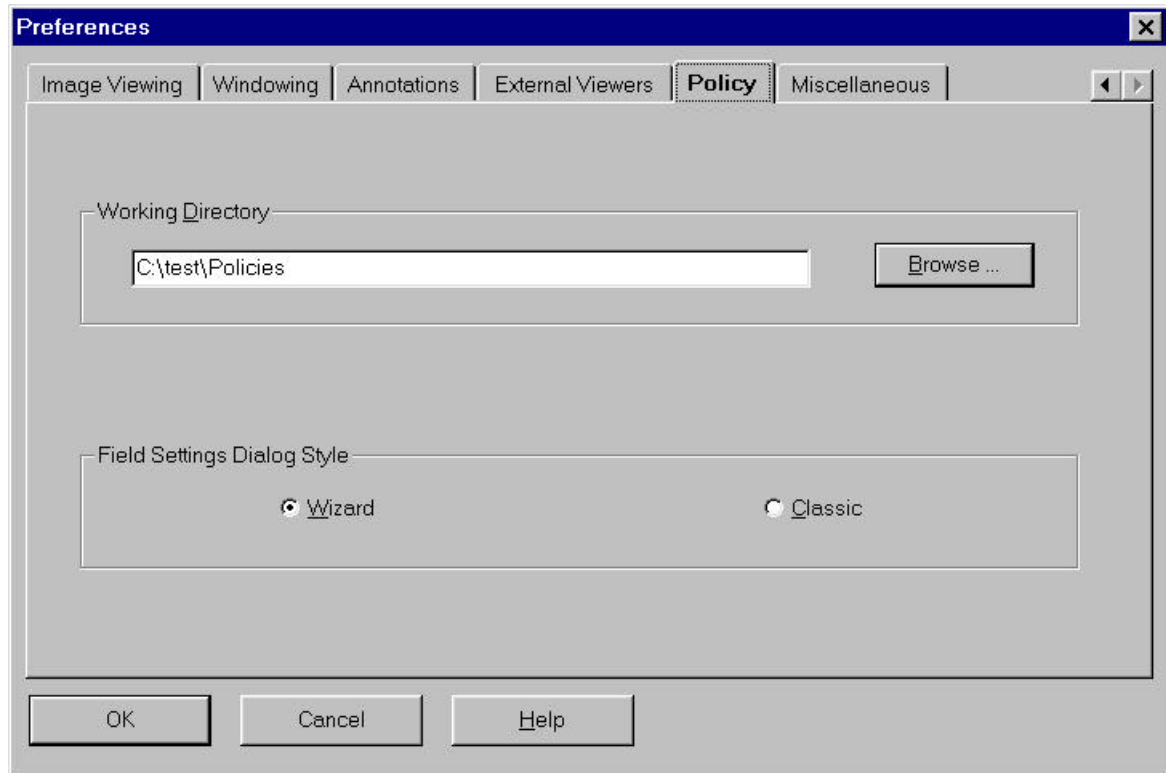


Figure C-8. The Preferences Dialog, with Policy Options

3. Select the desired options and click **OK**. Each option is explained below.

| Option            | Description                                                                                                         |
|-------------------|---------------------------------------------------------------------------------------------------------------------|
| Working Directory | Full path of the default directory for policy files.<br><b>Browse...</b> is available to help locate the directory. |

| Option                      | Description                                                                                                                                                                                                                                                                                                                  |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Field Settings Dialog Style | Determines how the Field Settings dialog tabs are displayed to the user.<br><b>Wizard</b> - the Field Settings dialog tabs are displayed sequentially. Users must click <b>Next</b> on each tab to advance to the next tab.<br><b>Classic</b> – all Field Settings dialog tabs are displayed and users can click on any one. |

### Miscellaneous Options

DocumentDirect lets you specify settings for each of the following:

- Display Drives – for Document Explorer.
- Default Paths – for DocuAnalyzer and for the DocumentDirect Help file.
- History List – size of list.
- Background Printing – select or deselect.

To set any of the miscellaneous options, perform the following steps:

1. Select **Options|Preferences**.
2. Click **Miscellaneous**. The dialog shown in Figure C-9 is displayed.

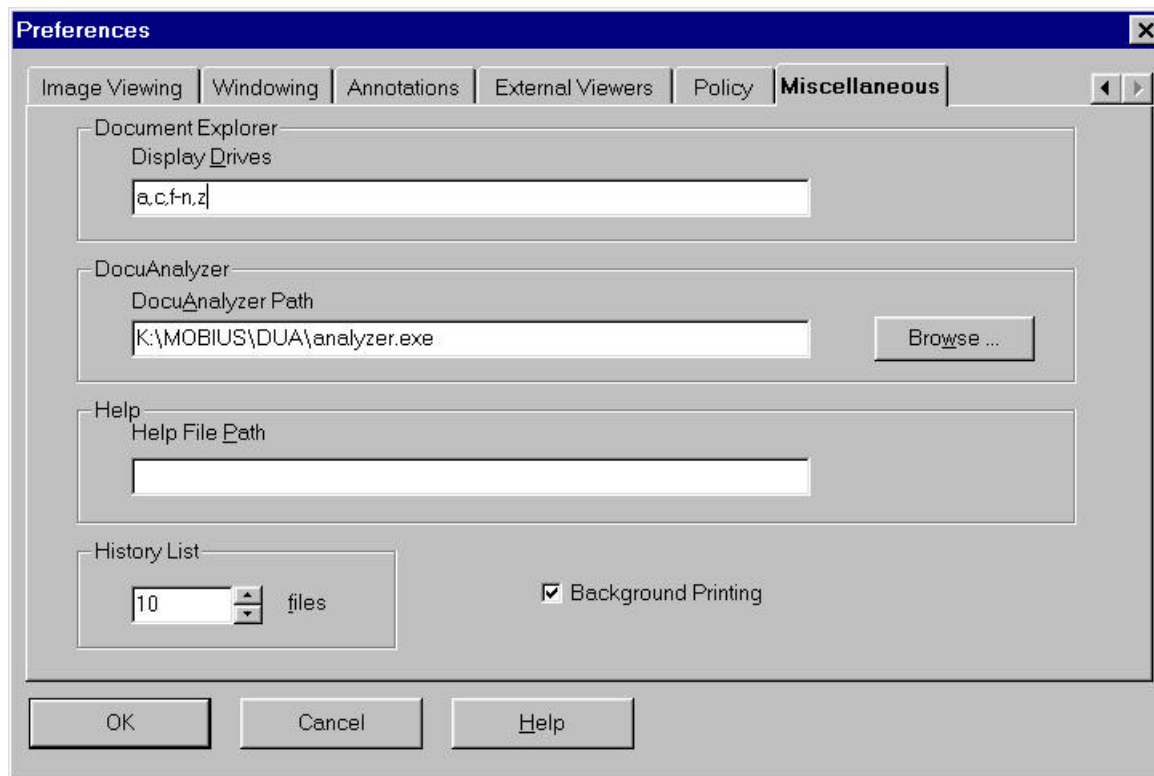


Figure C-9. The Preferences Dialog, with Miscellaneous Options

3. Select the desired options and click **OK**. Each option is explained below.

| Option            | Description                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Display Drives    | Local or network drives to be displayed by DocumentDirect's Document Explorer. Specify individual drives by separating them with commas. Specify a range of drives with a hyphen between the drives. For example, to specify that drives C, D, and F through N are to be displayed by Document Explorer, type <b>C, D, F-N</b> .<br><br>This option is enabled in DocumentDirect and disabled in DocumentDirect Application Suite. |
| DocuAnalyzer Path | Full path to the DocuAnalyzer program. Required, if you want to launch DocuAnalyzer from within DocumentDirect.<br><br><b>Browse ...</b> is available to help locate the program path.                                                                                                                                                                                                                                             |
| Help File Path    | Full path to the Help file. If the path is omitted, the Help file must reside in the directory in which DocumentDirect is installed.                                                                                                                                                                                                                                                                                               |

| Option              | Description                                                                                                                                                                                                                                                              |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| History List        | Number of most recently viewed report files retained in the history list.                                                                                                                                                                                                |
| Background Printing | Print documents in the background. Applies only to the following types of documents: <ul style="list-style-type: none"><li>• Documents opened from TCP/IP, network, or stand-alone document servers.</li><li>• Documents opened from a local or network drive.</li></ul> |

## ***Customizing Toolbars and Menus***

---

The standard DocumentDirect installation provides a default toolbar, menu bar, and set of built-in commands. The default toolbar provides, via buttons, ways to use various DocumentDirect commands, and the default menu bar provides, via menus, ways to use a larger set of built-in DocumentDirect commands. The default toolbar can be dragged to and floated anywhere on the desktop, or can be docked at the top, bottom, left, or right edges of the DocumentDirect window.

In addition, DocumentDirect provides users and administrators with the ability to customize DocumentDirect in the following ways:

- Create custom toolbars that can be floated or docked
- Create custom menus and submenus
- Add custom buttons and commands that run DocumentDirect scripts and Windows programs
- Delete buttons and commands
- Reorganize buttons and commands
- Add separators to toolbars and menus
- Delete the default toolbar and default menus

DocumentDirect also provides administrators with the ability to create and distribute custom toolbar and menu configurations to users. Administrators can define specific, unalterable toolbar and menu configurations, or can restrict user access to only a subset of DocumentDirect functions. And, for administrators in a multi-language environment, DocumentDirect configurations are language-specific. See Chapter C6, "Creating Custom Configurations" for information on administrator functions.

The steps you follow in order to customize your toolbars and menus depend on whether the commands, toolbars, menus, or submenus already exist. Use the table below to determine, according to your situation, which instructions to follow.

commands, toolbars, menus, or submenus already exist. Use the table below to determine, according to your situation, which instructions to follow.

| If you want to...                                                                                                                   | Then...                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Put built-in commands, that is, commands that are part of the default DocumentDirect installation, on toolbars, menus, or submenus. | See "Determining if the Command Already Exists."                                                  |
| Put custom commands that run DocumentDirect scripts on toolbars, menus, or submenus.                                                | See "Adding a Command."                                                                           |
| Put custom commands that run Windows programs on toolbars, menus, or submenus.                                                      | See "Adding a Command."                                                                           |
| Create new toolbars, menus, or submenus and then place commands on them.                                                            | See "Determining if the Toolbar or Menu Already Exists" and "Adding a Toolbar, Menu, or Submenu." |
| Add existing commands to existing menus and submenus, and, as buttons, to existing toolbars.                                        | See "Adding a Button to a Toolbar, or a Command to a Menu."                                       |
| Change and delete commands, toolbars, menus, and submenus.                                                                          | See "Changing Toolbars or Menus," "Removing a Command," and "Deleting a Toolbar or Menu."         |

After you make your changes, DocumentDirect allows you to preview the changes and use the revised configuration before you save your changes.

## Determining if the Command Already Exists

Use these instructions to determine if the command you want to use on a toolbar, menu, or submenu already exists.

1. On the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears as shown in Figure C-10.



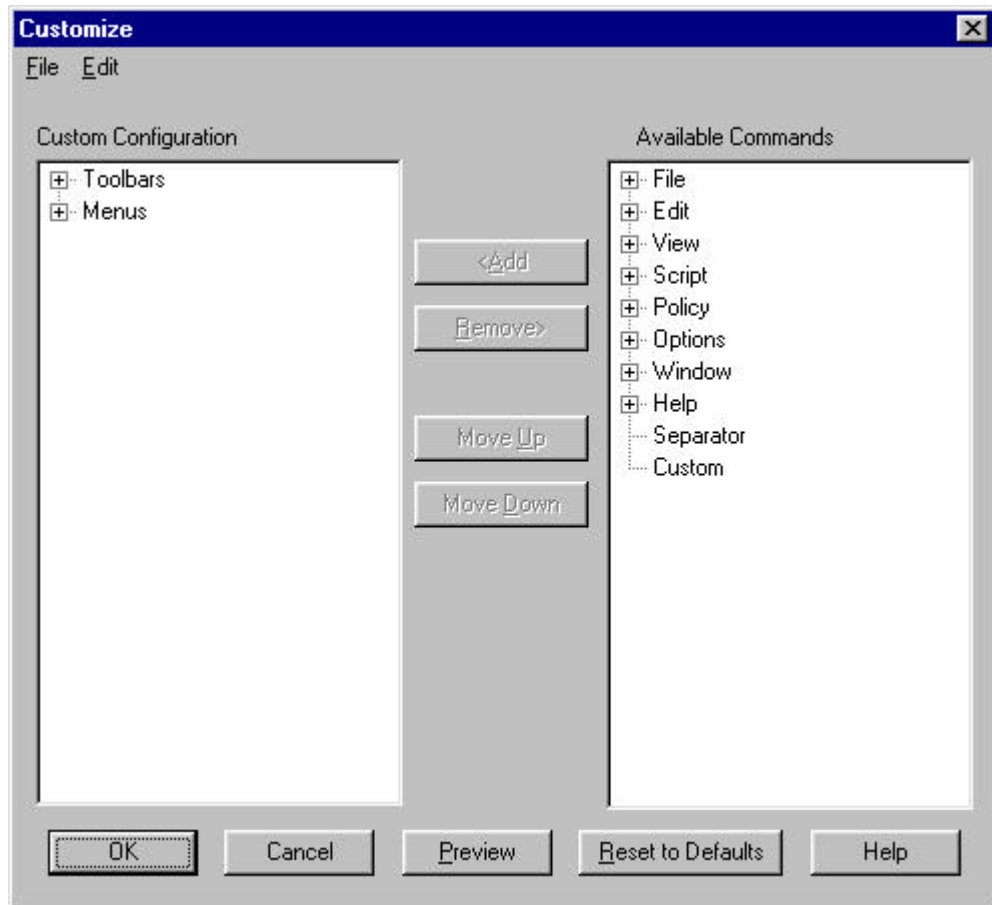


Figure C-10. Customize Dialog

2. If necessary, expand all the available commands by clicking the plus icons in the Available Commands pane. The pane appears as shown in Figure C-11.

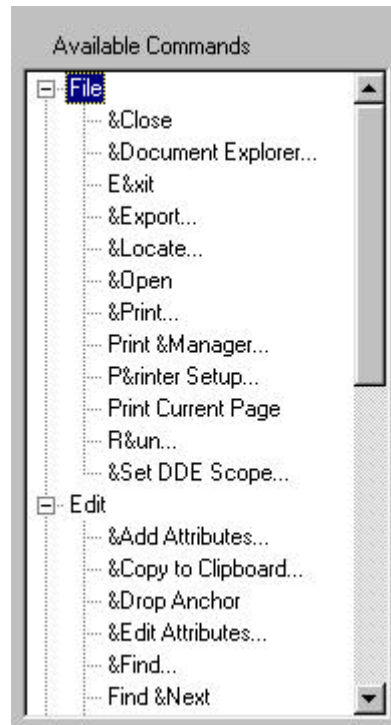


Figure C-11. Available Commands Pane

3. Determine if the command you want to use appears in the Available Commands pane.
  - a. If it doesn't, but there is another command that is similar that you can use to create the command you want, go to "Copying a Command to Create a New Command," then go on to "Determining if the Toolbar or Menu Already Exists."
  - b. If it doesn't, and there are no other commands that are similar, go to "Adding a Command," then go on to "Determining if the Toolbar or Menu Already Exists."
  - c. If it does, go to "Determining if the Toolbar or Menu Already Exists."

## Adding a Command

DocumentDirect allows you to add custom buttons and commands that run DocumentDirect scripts and Windows programs. Valid DocumentDirect script files have file extensions of MSL or SCR. Valid Windows program files have file extensions of EXE, COM, or BAT.

1. In the Customize dialog, select the **Edit** menu.
2. Select either **New Script Command** or **New Program Command**. A dialog is displayed that has the same fields and buttons as the dialog shown in Figure C-12. The name of the dialog reflects whether you are creating a script or program

command.

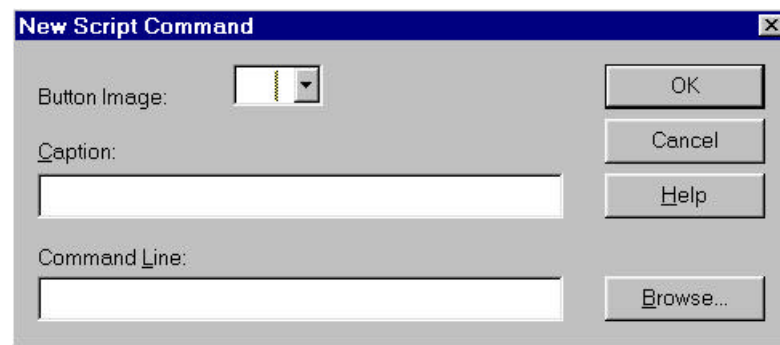


Figure C-12. New Script Command Dialog

3. Complete the dialog as follows:
  - a. Select a **Button Image** from the drop-down list. This is the image that appears on the button when you add this command to a toolbar.
  - b. Enter a **Caption**. This is the text that appears on the menu when you add this command to a menu and as the button's tooltip when you add this command to a toolbar.

You can use an ampersand (&) prior to the letter you want to use as the shortcut key. Make sure that you do not use the same letter as a shortcut key more than once on a single menu. If you want an ampersand to be displayed as an ampersand on a menu, for example, "T&M Script," use two ampersands: "T&&M Script." Single ampersands will not appear in tooltips.

You can also use an ellipses (...) after the caption text if the command opens a dialog.

- c. Enter the **Command Line** for the script or program that will be run when the button or menu command is selected. Use the **Browse** button to navigate to, or enter the full path and filename of the DocumentDirect script file or the Windows program file. Valid DocumentDirect script files have file extensions of MSL or SCR. Valid Windows program files have file extensions of EXE, COM, or BAT. Be sure to enter all required command line parameters.

4. Click **OK**. The new command appears in the Available Commands pane under **Custom**, as shown in Figure C-13.

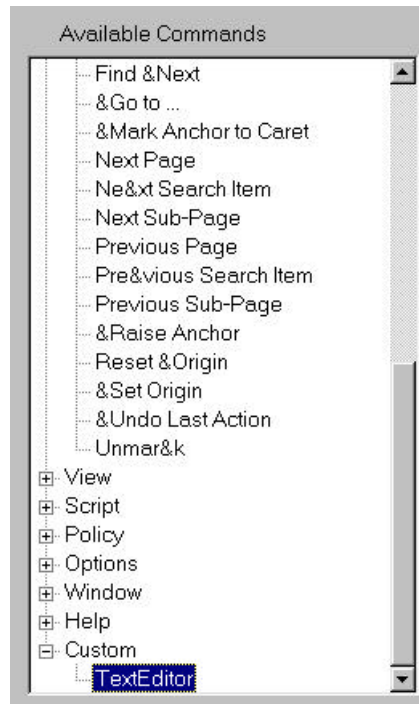


Figure C-13. Available Commands Pane with Custom Command

## Copying a Command to Create a New Command

The Customize dialog's **Edit|Copy** function can only be used to make copies of custom commands. Custom commands run DocumentDirect scripts and Windows programs, and are found under **Custom** in the Available Commands pane. This **Copy** function makes it easy to create a new command from an existing command when there are minor differences in command line parameters or names.

1. Select a custom command from the Available Commands pane.
2. In the Customize dialog, select **Edit|Copy**.

3. A copy of the selected command appears under **Custom** in the Available Commands pane. Its caption is the same as the copied command's caption, but is preceded by "Copy of" as shown in Figure C-14.

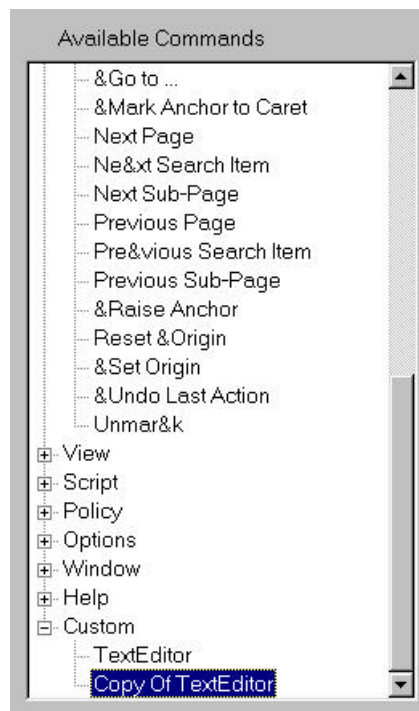


Figure C-14. Available Commands Pane with Copied Command

4. In the Customize dialog, select **Edit|Edit**. A dialog is displayed that has the same fields and buttons as the dialog shown in Figure C-15. The name of the dialog varies depending on the file extension of the copied command.



Figure C-15. Edit Program Command Dialog

5. Make all necessary changes.
6. Click **OK**.

## Determining if the Toolbar or Menu Already Exists

Use these instructions to determine if the toolbar, menu, or submenu you want to use already

1. On the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears as shown in Figure C-16.

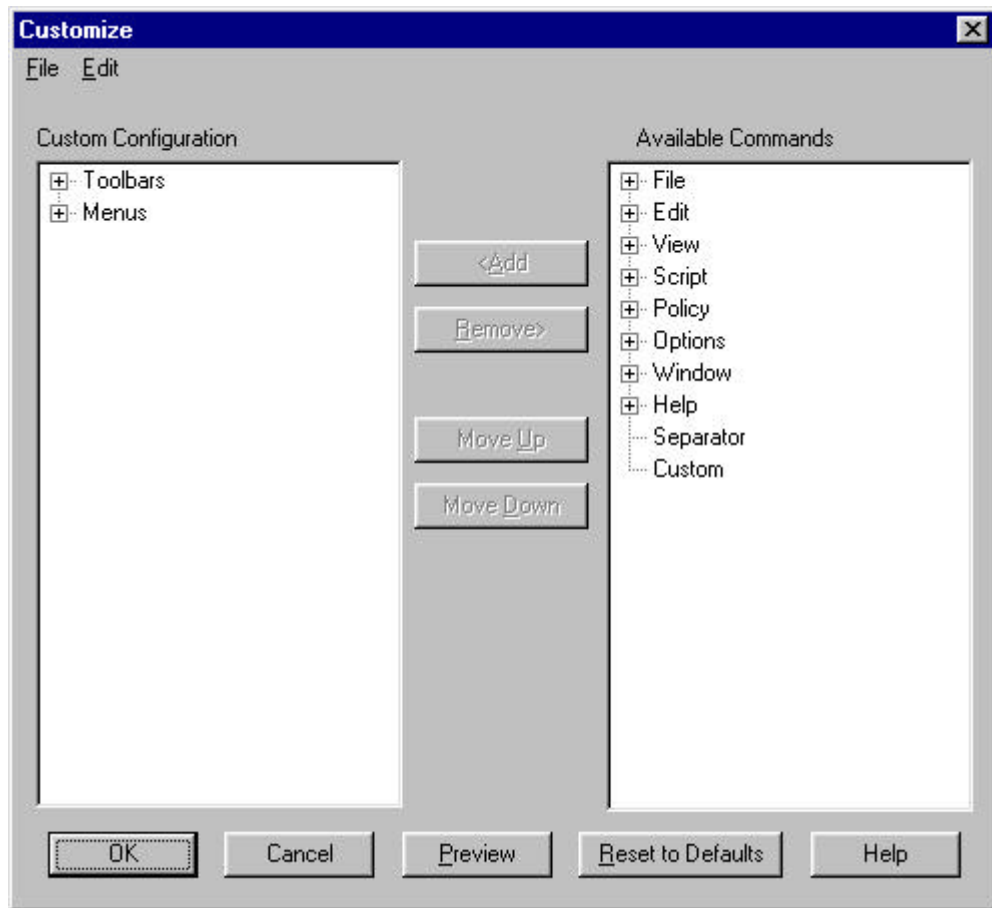


Figure C-16. Customize Dialog

2. If necessary, expand all of the available toolbars or menus by clicking the plus icons in the Custom Configuration pane. The pane appears as shown in Figure C-17.

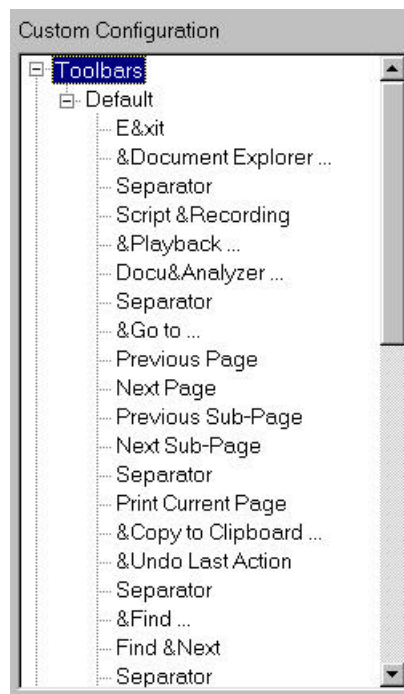


Figure C-17. Custom Configuration Pane

3. Determine if the toolbar or menu appears in the Custom Configuration pane.
  - a. If it doesn't, go to "Adding a Toolbar, Menu, or Submenu." Then go on to "Adding a Button to a Toolbar, or a Command to a Menu."
  - b. If it does, go to "Adding a Button to a Toolbar, or a Command to a Menu."

### Adding a Toolbar, Menu, or Submenu

Use these instructions to add a new toolbar, menu, or submenu to the DocumentDirect window.

1. Decide if you want to add a toolbar, menu, or submenu. Use the table below to select the appropriate item in the Custom Configuration pane.

| If you want to add a...             | Then, in the Custom Configuration Pane...             |
|-------------------------------------|-------------------------------------------------------|
| Toolbar                             | Select <b>Toolbars</b>                                |
| Menu to the DocumentDirect menu bar | Select <b>Menus</b>                                   |
| Submenu to an existing menu         | Select the appropriate menu, such as <b>&amp;File</b> |

2. In the Customize dialog, select the **Edit** menu.
3. Select either **New Menu** or **New Toolbar**. A dialog is displayed that has the same field and buttons as the dialog shown in Figure C-18. The name of the dialog reflects whether you are creating a menu or toolbar.

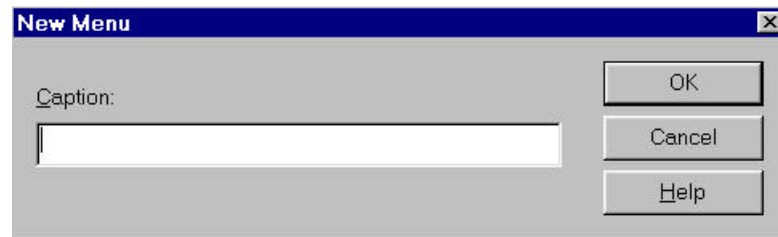


Figure C-18. New Menu Dialog

4. Enter a **Caption**.
  - a. If you are creating a menu, this is the menu name that appears on the DocumentDirect menu bar and in the Custom Configuration pane of the Customize dialog.
  - b. If you are creating a submenu, this is the submenu name that appears on the menu and in the Custom Configuration pane of the Customize dialog.
  - c. If you are creating a toolbar, this is the toolbar name that appears in the Custom Configuration pane of the Customize dialog.
5. Click **OK**.
6. The name of the menu, submenu, or toolbar appears in the Custom Configuration pane under **Menus** or **Toolbars**, as shown in Figure C-19.

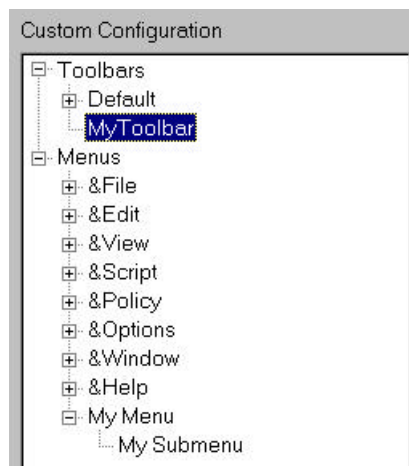


Figure C-19. Custom Configuration Pane



## Adding a Button to a Toolbar, or a Command to a Menu

Use these instructions to add a button to a toolbar, or a command to a menu or submenu.

1. Decide where you want to place the button or command. In the Custom Configuration pane, select the toolbar, menu, button, or command that you want to precede the button or command you are adding.
2. In the Available Commands pane, select the command you want to add.
3. Click **Add**. The command is added to the toolbar, menu, or submenu.
4. Click **Preview** to see the button on the toolbar or the command on the menu as shown in Figure C-20 and Figure C-21.



Figure C-20. Document Direct Toolbar with Added Button

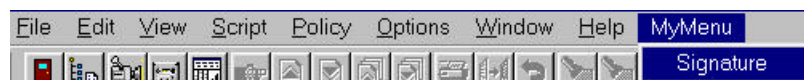


Figure C-21. DocumentDirect Menu Bar with Added Menu

5. Make sure the toolbar or menu looks the way you want. Use the button or command and make sure it works the way you want it to.
  - a. If you want to make more changes, go to "Changing Toolbars or Menus."
  - b. If the new toolbars, menus, or buttons look and work the way you want, click **OK** to save the changes. The Customize dialog closes and the new configuration is in effect for your workstation.

## Changing Toolbars or Menus

DocumentDirect provides you with the ability to customize your DocumentDirect toolbar and menus.

Use these instructions to make changes, including:

- Reorganize buttons and commands
- Add separators to toolbars and menus
- Delete buttons and commands
- Change the names of toolbars, menus, submenus, or commands
- Change the script or program invoked by a button or command
- Move a toolbar

- Delete toolbars, menus, or submenus
- Restore the default DocumentDirect configuration

## *Moving Buttons or Commands*

Use these instructions to change the position of buttons on toolbars or commands on menus.

1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
2. In the Custom Configuration pane, select the button, command, or separator you want to move.
3. Use **Move Up** or **Move Down** to reposition the button, command, or separator. You can move buttons, commands, and separators from one toolbar to another, and from one menu to another this way.

## *Adding a Separator between Buttons or Commands*

Use these instructions to add separators between buttons on toolbars or between commands on menus.

1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
2. In the Custom Configuration pane, select the button or command that is to precede the separator you are adding.
3. In the Available Commands pane, select the separator.
4. Click **Add**.

## *Removing Buttons, Commands, or Separators*

**Custom Configuration Pane:** You can remove buttons, commands, and separators from the Custom Configuration pane.

1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
2. In the Custom Configuration pane, select the button, command, or separator you want to remove.
3. Click **Remove**.

**Available Commands Pane:** You can only remove custom commands from the Available Commands pane.

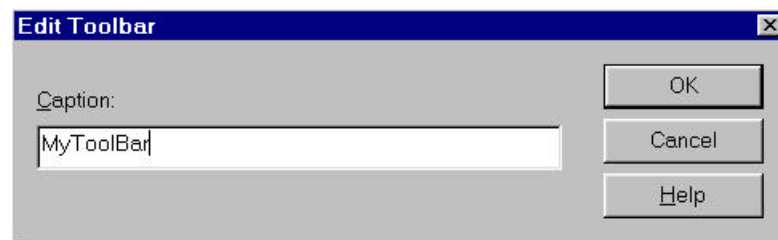
1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.

2. In the Available Commands pane, select the command you want to delete.
3. In the Customize dialog, select **Edit|Remove**.

#### *Changing the Name of a Toolbar, Menu, Submenu, or Command*

Use these instructions to change the name of a toolbar, menu, submenu or command.

1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
2. In either the Custom Configuration or Available Commands pane, select the item you want to change.
3. In the Customize dialog, select **Edit|Edit**.
  - a. If you select a toolbar, menu, or submenu, a dialog similar to the one shown in Figure C-22 appears. The dialog name reflects whether you are editing a toolbar or menu.



*Figure C-22. Edit Toolbar Dialog*

- b. If you select a built-in DocumentDirect command, the Edit Built In Command dialog appears as shown in Figure C-23.



*Figure C-23. Edit Built In Command Dialog*

- c. If you select a script or program command, a dialog similar to the one shown in Figure C-24 appears. The dialog name reflects whether you are editing a script or program command.

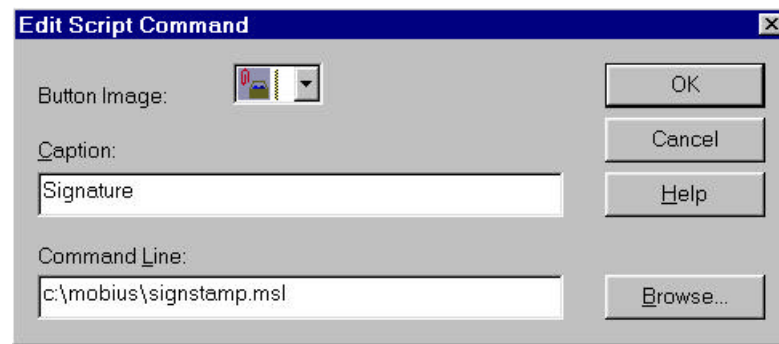


Figure C-24. Edit Script Command Dialog

4. Change the **Caption**.
5. Click **OK**.

#### Changing the Command Line

The command lines of custom commands can be changed. However, you *cannot* change the command lines of built-in, that is, default, DocumentDirect commands.

1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
2. Select a custom command in either the Custom Configuration or Available Commands pane.
3. In the Customize dialog, select **Edit|Edit**. A dialog similar to the one shown in Figure C-25 appears. The dialog name reflects whether you are editing a script or program command.

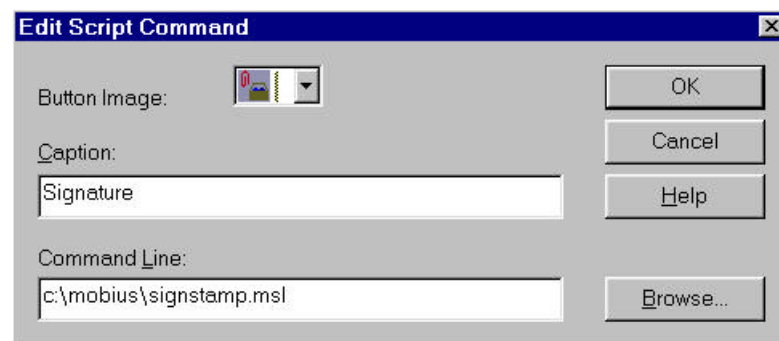


Figure C-25. Edit Script Command Dialog

4. Change the **Command Line** or use **Browse** to navigate to a different DocumentDirect script or Windows program. Be sure to enter all required command line parameters. The **Command Line** field is disabled when a built-in

command is displayed.

5. Click **OK**.

## *Moving a Toolbar*

Custom toolbars can be docked or floated the same way you can dock or float the default DocumentDirect toolbar.

- To dock the toolbar along a different edge of the DocumentDirect window, click the gray space around the toolbar buttons and drag the toolbar to the new location. It snaps into place along the edge of the window.
- To float the toolbar, click the gray space around the toolbar buttons and drag the toolbar away from the edge of the DocumentDirect window.

## Removing a Command

**Available Commands Pane:** Built-in DocumentDirect commands *cannot* be removed from the Available Commands pane. Only custom commands can be removed, that is, those found under **Custom** in the Available Commands pane.

**Custom Configuration Pane:** Both built-in and custom commands can be removed from the Custom Configuration pane.

1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
2. Select a custom command in either the Custom Configuration or Available Commands pane.
3. In the Customize dialog, select **Edit|Remove**.

## Deleting a Toolbar or Menu

Any of the toolbars, menus, or submenus in the Custom Configuration pane can be deleted.

1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
2. Select an item in the Custom Configuration pane.
3. Click **Remove**.

## Restoring the Default Configuration

The default DocumentDirect toolbar and menu bar configuration exists separately from your workstation's specific configuration. Because of this, the default DocumentDirect configuration cannot be overwritten or lost, and is easily restored if you want to discard your custom configuration.

1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
2. Click **Reset to Defaults**.
3. Click **OK**.

## Customize Interface Dialogs and Menus

The **Customize Interface** item on the DocumentDirect **Options** menu displays the Customize dialog that allows you to add new items to menus and toolbars, and to customize the sequence of what appears on toolbars and menus. It also provides access to other dialogs and menus that allow you to create new toolbars and menus.

### Customize Dialog

The Customize dialog, as shown in Figure C-26, allows you to add new items to menus and toolbars, and to customize the sequence of what appears on toolbars and menus. It also provides access to other dialogs and menus.

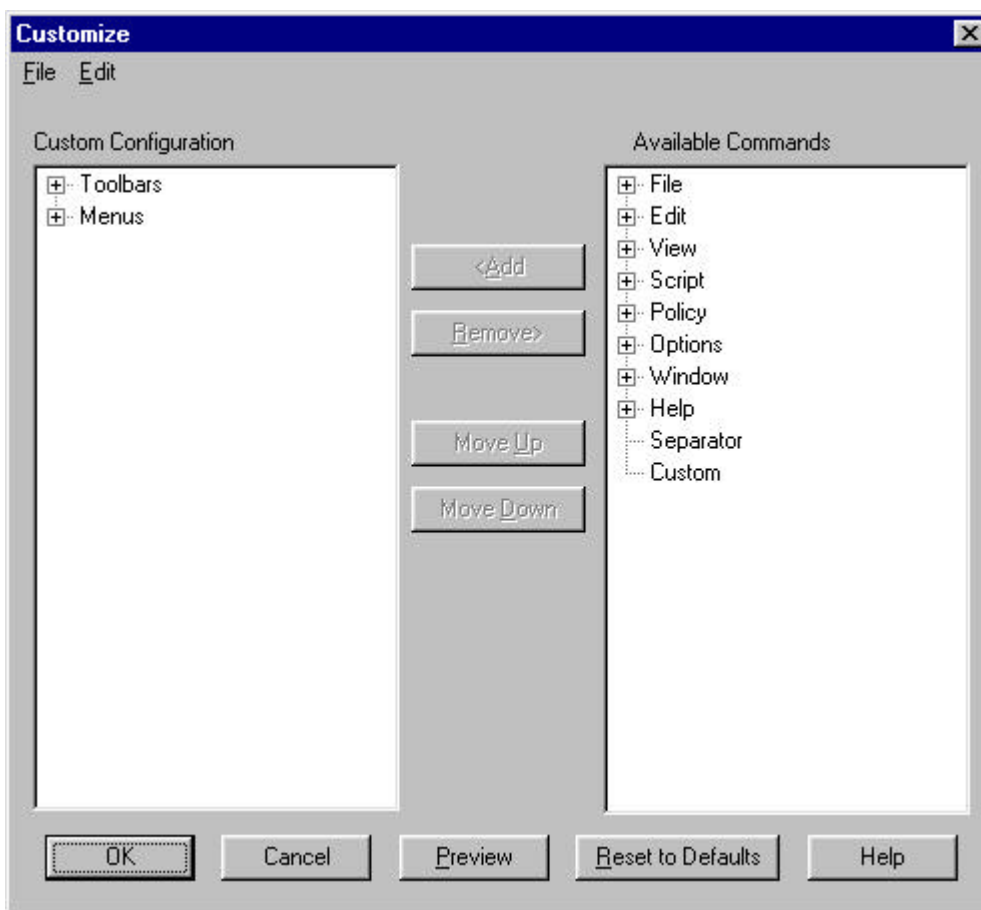


Figure C-26. Customize Dialog

| Item | Description |
|------|-------------|
|------|-------------|

| Item                      | Description                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Custom Configuration pane | Displays the details of the DocumentDirect toolbar and menu bar configuration currently being customized.                                                                                                                                                                                                                                                   |
| Available Commands pane   | Displays all of the default, that is, built-in, DocumentDirect commands and custom commands available for use.                                                                                                                                                                                                                                              |
| Add button                | <p>Adds a command from the Available Commands pane to the Custom Configuration pane.</p> <ol style="list-style-type: none"> <li>1. Select a toolbar, menu, or submenu in the Custom Configuration pane.</li> <li>2. Select a command in the Available Commands pane.</li> <li>3. Click <b>Add</b>.</li> </ol>                                               |
| Remove button             | <p>Removes a command, toolbar, menu, or submenu from the Custom Configuration pane.</p> <ol style="list-style-type: none"> <li>1. Select a toolbar, menu, or submenu in the Custom Configuration pane.</li> <li>2. Select a command in the Available Commands pane.</li> <li>3. Click <b>Remove</b>.</li> </ol>                                             |
| Move Up button            | <p>Shifts a command up one position in the Custom Configuration pane.</p> <ol style="list-style-type: none"> <li>1. Select a command in the Custom Configuration pane.</li> <li>2. Click <b>Move Up</b>.</li> </ol>                                                                                                                                         |
| Move Down button          | <p>Shifts a command down one position in the Custom Configuration pane.</p> <ol style="list-style-type: none"> <li>1. Select a command in the Custom Configuration pane.</li> <li>2. Click <b>Move Down</b>.</li> </ol>                                                                                                                                     |
| OK button                 | Saves the changes made to this workstation's configuration.                                                                                                                                                                                                                                                                                                 |
| Cancel button             | Discards the changes made to this workstation's configuration.                                                                                                                                                                                                                                                                                              |
| Preview button            | <p>Permits you to see and use the configuration changes you made before saving them.</p> <ol style="list-style-type: none"> <li>1. Make changes.</li> <li>2. Click <b>Preview</b>.</li> <li>3. Use the added or changed buttons, toolbars, commands, or menus.</li> <li>4. Make additional changes if necessary, and click <b>Preview</b> again.</li> </ol> |

| Item                     | Description                                                                                             |
|--------------------------|---------------------------------------------------------------------------------------------------------|
| Reset to Defaults button | Restores configuration to the configuration provided during the initial installation of DocumentDirect. |
| File menu                | Displays the File menu. See "Customize Dialog File Menu."                                               |
| Edit menu                | Displays the Edit menu. See "Customize Dialog Edit Menu."                                               |

### Customize Dialog Context Menu

The Customize dialog context menu allows you to edit and remove commands, toolbars, menus, and submenus, and to copy custom commands. Right-click on an item in either the Custom Configuration or Available Commands pane to display the context menu as shown in Figure C-27.

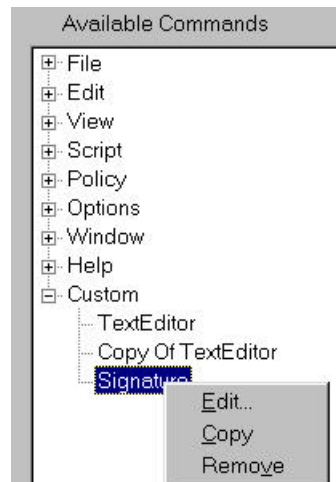


Figure C-27. Customize Dialog Context Menu

| Menu Item | Description                                                                                                                                |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Edit      | Displays the appropriate dialog depending on whether a custom command, toolbar, menu, or submenu is selected.                              |
| Copy      | Creates a copy of the selected custom command and adds it to the Available Commands pane. See "Copying a Command to Create a New Command." |
| Remove    | Removes the selected command, toolbar, menu, or submenu. See "Removing Buttons, Commands, or Separators."                                  |



## Customize Dialog File Menu

The Customize dialog File Menu, as shown in Figure C-28, allows you to close the dialog without saving changes to your workstation's DocumentDirect toolbar and menu bar configuration.

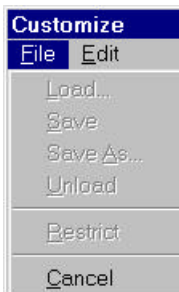


Figure C-28. Customize Dialog File Menu

## Customize Dialog Edit Menu

The Customize dialog Edit Menu, as shown in Figure C-29, provides you with the ability to add, edit, or remove commands, toolbars, menus, and submenus, and to copy custom commands in order to create new commands.

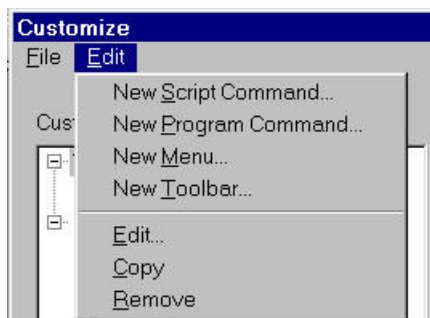


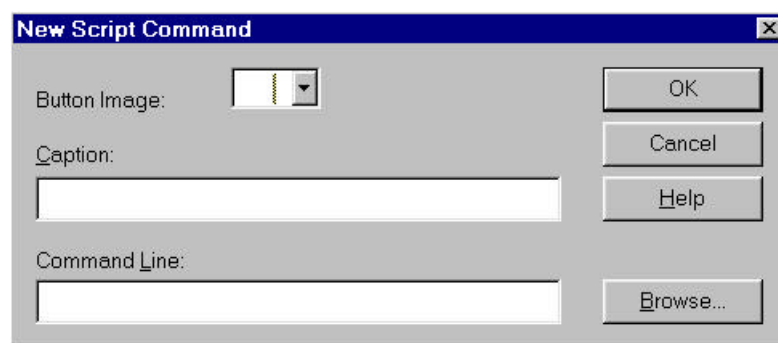
Figure C-29. Customize Dialog Edit Menu

| Menu Item           | Description                                                                                                        |
|---------------------|--------------------------------------------------------------------------------------------------------------------|
| New Script Command  | Displays the New/Edit Command dialog. See "New/Edit Command Dialog."                                               |
| New Program Command | Displays the New/Edit Command dialog. See "New/Edit Command Dialog."                                               |
| New Menu            | Displays the New/Edit Menu/Toolbar dialog. See "New/Edit Menu/Toolbar Dialog."                                     |
| New Toolbar         | Displays the New/Edit Toolbar dialog. See "New/Edit Menu/Toolbar Dialog."                                          |
| Edit                | Displays the appropriate edit dialog depending on whether a custom command, toolbar, menu, or submenu is selected. |

| Menu Item | Description                                                                                                                                |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Copy      | Creates a copy of the selected custom command and adds it to the Available Commands pane. See "Copying a Command to Create a New Command." |
| Remove    | Removes the selected command, toolbar, menu or sub menu. See "Removing Buttons, Commands, or Separators."                                  |

### *New/Edit Command Dialog*

The New/Edit Command dialog, similar to the dialog shown in Figure C-30, allows you to define or change a command. This includes defining or changing the bitmap associated with the command, the text associated with the command, and the command line that is invoked. The name of the dialog reflects whether you are creating or editing a command, and whether the command is a script, program, or built-in command.



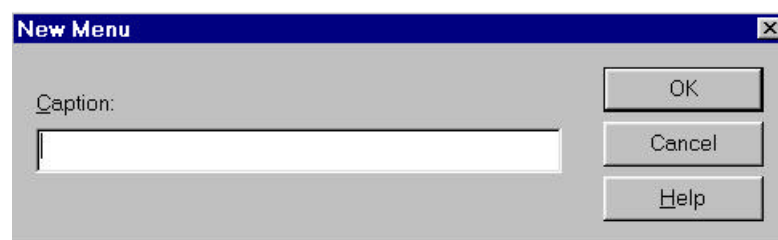
*Figure C-30. New Script Command Dialog*

| Item         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Button Image | Use the drop-down list box to display and select a button image. This image appears on the button when you add this script, program or built-in command to a toolbar.                                                                                                                                                                                                                                                                                                                                                          |
| Caption      | Enter or change the text that appears on the menu when you add this command to a menu and that appears as the button's tooltip when you add this command to a toolbar. Use an ampersand (&) prior to the letter you want to use as the shortcut key. Do not use the same letter as a shortcut key more than once on a single menu. To display an ampersand on a menu, use two ampersands: "T&&M Script." Single ampersands do not appear in tooltips. Use ellipses (...) after the caption text if the command opens a dialog. |

| Item         | Description                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Command Line | Enter the complete command line for the DocumentDirect script or Windows program that will be run when the button or menu command is selected. Valid DocumentDirect script files have file extensions of MSL or SCR. Valid Windows program files have file extensions of EXE, COM, or BAT. Be sure to enter all required command line parameters. This field is disabled when you are editing built-in commands. |
| OK           | Saves the new command or changes to the command, and closes the New/Edit Command dialog.                                                                                                                                                                                                                                                                                                                         |
| Cancel       | Discards the new command or changes to the command, and closes the New/Edit Command dialog.                                                                                                                                                                                                                                                                                                                      |
| Browse       | Use the Browse button to navigate to and select the full path and filename of the DocumentDirect script file or the Windows program file.                                                                                                                                                                                                                                                                        |

#### *New/Edit Menu/Toolbar Dialog*

The New/Edit Menu/Toolbar dialog, similar to the dialog shown in Figure C-31, allows you to define or change the text that is associated with a menu, submenu or toolbar. The name of the dialog reflects whether you are creating or editing a menu or a toolbar.



*Figure C-31. New Menu Dialog*

| Item    | Description                                                                                                                                                                                                                                                                                                                                                             |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Caption | <p>This is one of the following:</p> <ul style="list-style-type: none"> <li>• Name of the menu that appears on the DocumentDirect menu bar and in the Custom Configuration pane.</li> <li>• Name of the submenu that appears on the menu and in the Custom Configuration pane.</li> <li>• Name of the toolbar that appears in the Custom Configuration pane.</li> </ul> |

| Item   | Description                                                                                                                                                  |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OK     | Saves the new caption, or saves changes to the caption, and closes the New/Edit Menu/Toolbar dialog. Changes are reflected in the Custom Configuration pane. |
| Cancel | Discards the new caption, or changes to the caption, and closes the New/Edit Menu/Toolbar dialog.                                                            |

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## ***Customizing Document Explorer***

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Document Explorer's Auto Expand feature allows you to customize the Document Explorer interface. The **Options|Customize Explorer** dialog provides **Report** and **Topic** tabs that control the way report and topic lists display. These tabs allow you to configure Document Explorer in the following ways:

- The **Report View** and **Topic View** check boxes cause document servers to display either reports or topics. For example, if you select Topic View, only the list of topics appears for that document server.
- The **Auto Expand** check boxes cause Document Explorer to expand lists automatically at whatever point you specify in the report or topic hierarchy. If you select this option, the expanded list displays only the specified entry at the requested level. For example, if you select Auto Expand Report ID, the first report on the list is expanded automatically when you select that document server.

To specify how reports, topics, versions, and sections display for a specific document server, perform the following steps:

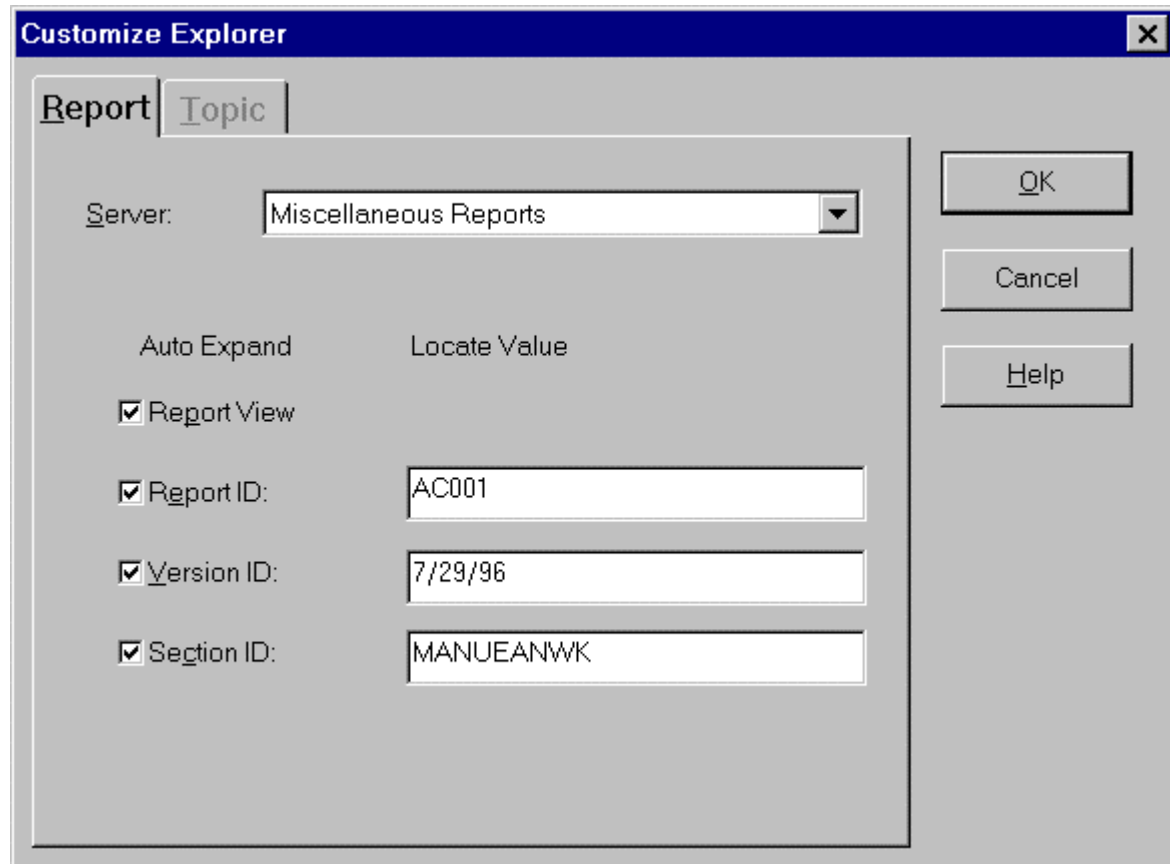


Figure C-1. The Customize Explorer Dialog, with Report Tab Entries

1. Select **Options|Customize Explorer**. The Customize Explorer dialog appears, as shown in Figure C-1.

**Note:** Before you can customize the display for a specific document server, make sure it has no sessions open.

2. Open the drop-down list in the Server field, and select the document server for which you want to specify Auto Expand settings.

**Note:** If you did not set up the document server for which you want to configure Auto Expand, see Chapter C1 "Managing Document Servers."

3. Do one of the following:

- To configure report display, click the **Report** tab. A dialog like the one in Figure C-1 appears.
- To configure topic display, click the **Topic** tab. A dialog like the one in Figure C-2 appears. Proceed to Step 5, below.

4. To customize report display, do one of the following:

- To display report entries only, click the **Report View** Auto Expand check box.

- To display the first report listed, click the **Report ID** Auto Expand check box, and leave the **Locate Value** field blank. If you want to display only the first version or the first section, repeat this Step for the **Version ID** and **Section ID** Auto Expand check boxes.
- To display a specific report, click the **Report ID** Auto Expand check box, then click the **Locate Value** field or press **Tab**, and type the name of the report you want to display. Repeat this Step for the **Version ID** and **Section ID** fields.

**Notes:** 1) The **Locate Value** field is not available until you check the associated Auto Expand check box.

2) If you enter a specific value in the **Locate Value** field, and that value is not found, Document Explorer locates the value appearing in the list after the position where the specified value would appear, if it were present.

Proceed to Step 6, below.

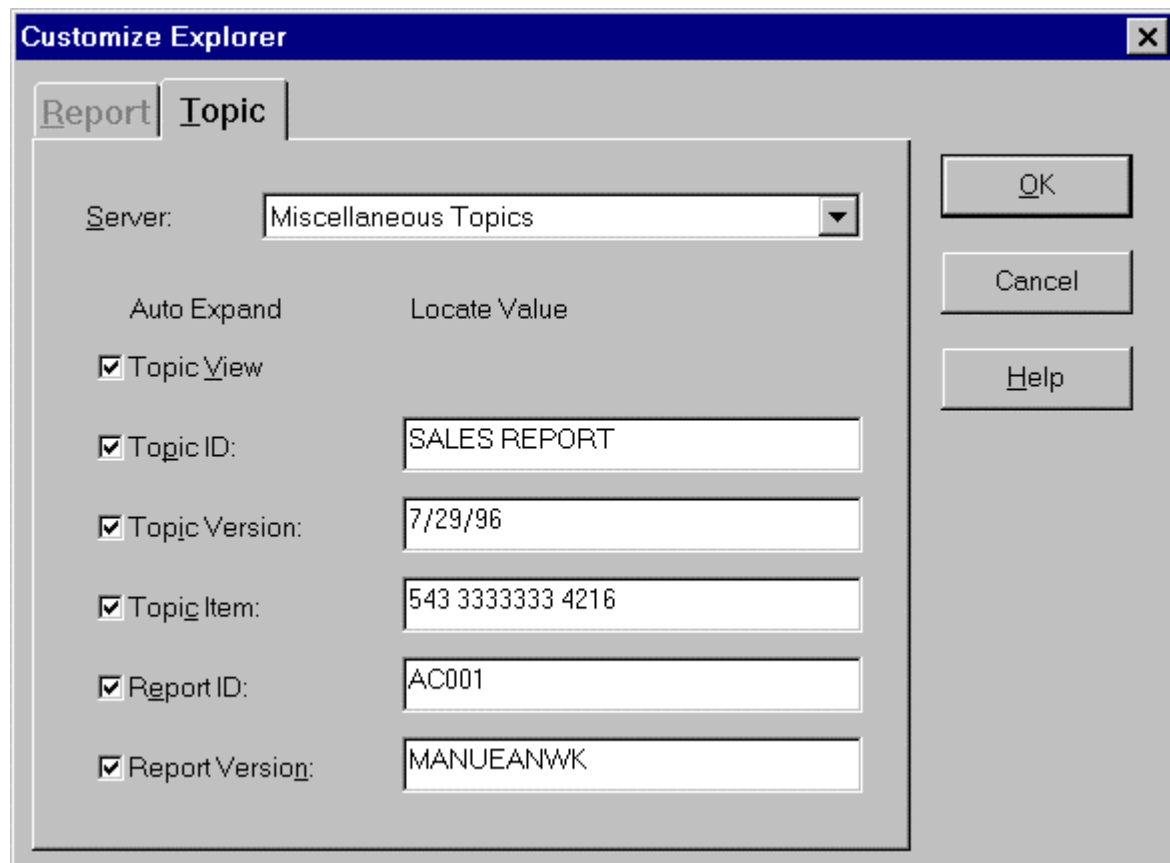


Figure C-2. The Customize Explorer Dialog

5. To customize topic display, do one of the following:
  - To display topic entries only, click the **Topic View** Auto Expand check box.

- To display the first topic listed, click the **Topic ID** Auto Expand check box, and leave the **Locate Value** field blank. If you want to display only the first topic version, topic item, Report ID, or report version, repeat this Step for the **Topic Version**, **Topic Item**, **Report ID**, and **Report Version** Auto Expand check boxes.
- To display a specific topic, click the **Topic ID** Auto Expand check box, then click once in the **Locate Value** field (or press **Tab**), and type a valid topic name. To display a specific topic version, item, Report ID, or report version, repeat this Step for the **Topic Version**, **Topic Item**, **Report ID**, and **Report Version** fields.

**Notes:** 1) The **Locate Value** field is not available until you check the associated Auto Expand check box.

2) If you enter a specific value in the **Locate Value** field, and that value is not found, Document Explorer locates the value appearing in the list after the position where the specified value would appear if it were present.

6. After you configure the document server to meet your needs, click **OK**. If you do not want to save the configuration, click **Cancel**. No changes take effect until you select **OK**.

## Example One

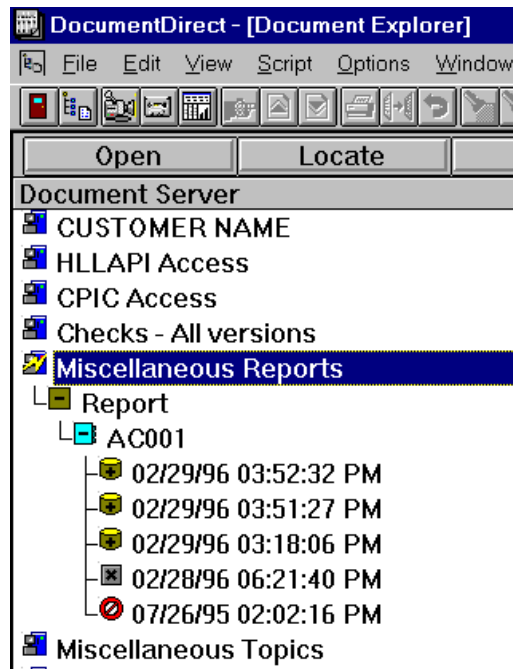
The following Auto Expand settings...

The screenshot shows the 'Customize Explorer' dialog box with the 'Report' tab selected. The 'Server' dropdown is set to 'Miscellaneous Reports'. Under the 'Auto Expand' section, the 'Report ID' checkbox is checked and its value is 'AC001'. The 'Version ID' and 'Section ID' checkboxes are unchecked. The 'Locate Value' section has three empty text input fields. On the right side of the dialog are 'OK', 'Cancel', and 'Help' buttons.

| Customize Explorer                             |                       |
|------------------------------------------------|-----------------------|
| <b>Report</b>   Topic                          |                       |
| Server:                                        | Miscellaneous Reports |
| <b>Auto Expand</b>                             |                       |
| <input type="checkbox"/> Report View           |                       |
| <input checked="" type="checkbox"/> Report ID: | AC001                 |
| <input type="checkbox"/> Version ID:           |                       |
| <input type="checkbox"/> Section ID:           |                       |
| <b>Locate Value</b>                            |                       |
|                                                |                       |
|                                                |                       |
|                                                |                       |
| OK<br>Cancel<br>Help                           |                       |



produce the following list in the Document Explorer window:



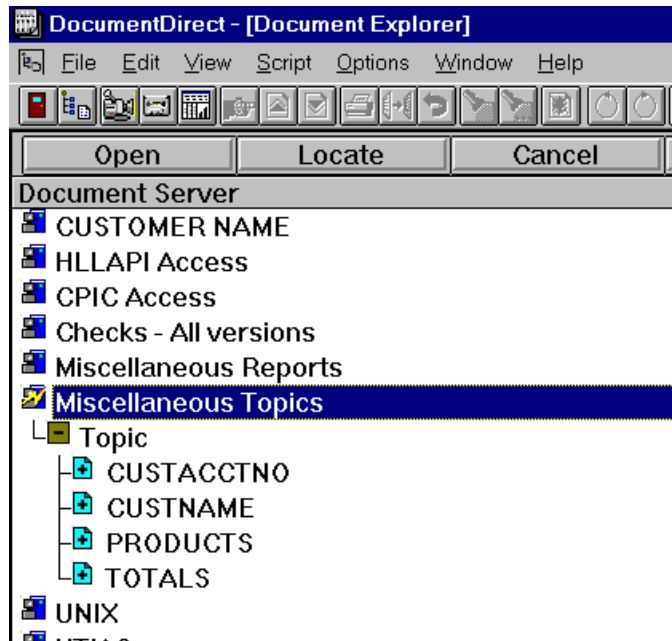
## Example Two

The following Auto Expand settings...

The screenshot shows the 'Customize Explorer' dialog box with the 'Topic' tab selected. The 'Server' dropdown is set to 'Miscellaneous Topics'. Under the 'Auto Expand' section, the 'Topic View' checkbox is checked. The 'Locate Value' section contains five empty text input fields corresponding to the unchecked checkboxes for 'Topic ID:', 'Topic Version:', 'Topic Item:', 'Report ID:', and 'Report Version:'.

| Auto Expand                                    | Locate Value |
|------------------------------------------------|--------------|
| <input checked="" type="checkbox"/> Topic View |              |
| <input type="checkbox"/> Topic ID:             |              |
| <input type="checkbox"/> Topic Version:        |              |
| <input type="checkbox"/> Topic Item:           |              |
| <input type="checkbox"/> Report ID:            |              |
| <input type="checkbox"/> Report Version:       |              |

produce the following list in the Document Explorer window:



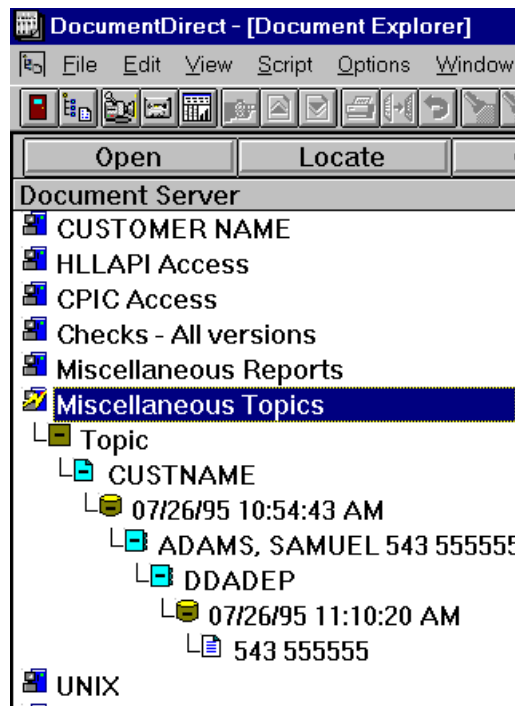
**Example Three**

The following Auto Expand settings...

The screenshot shows the 'Customize Explorer' dialog box with the 'Topic' tab selected. The 'Server' dropdown is set to 'Miscellaneous Topics'. Under the 'Auto Expand' section, the 'Topic View' checkbox is unchecked, while 'Topic ID', 'Topic Version', 'Topic Item', 'Report ID', and 'Report Version' are all checked. The 'Locate Value' column contains text input fields, with 'CUSTNAME' entered for 'Topic ID'. On the right side of the dialog are 'OK', 'Cancel', and 'Help' buttons.

| Auto Expand                                         | Locate Value |
|-----------------------------------------------------|--------------|
| <input type="checkbox"/> Topic View                 |              |
| <input checked="" type="checkbox"/> Topic ID:       | CUSTNAME     |
| <input checked="" type="checkbox"/> Topic Version:  |              |
| <input checked="" type="checkbox"/> Topic Item:     |              |
| <input checked="" type="checkbox"/> Report ID:      |              |
| <input checked="" type="checkbox"/> Report Version: |              |

produce the following list in the Document Explorer window:



---

## ***Resetting Default Settings to Dialogs***

---

During a DocumentDirect session, entries and selections that you make in certain dialogs are saved and become the defaults, until changed, for the current and future sessions. DocumentDirect lets you reset these settings to their defaults.

To reset dialog settings to their default values, select **Options|Reset Default Dialog Settings**.

---

## ***National Language Support***

---

DocumentDirect provides two levels of National Language Support:

- User Interface
- Archived Text Conversions

## User Interface

DocumentDirect can display all menus, dialogs, and Help text in the following languages:

- Chinese (Simplified)
- Chinese (Traditional)
- Danish
- English (British)
- English (United States)
- French (Canadian)
- French (Standard)
- German
- Italian
- Japanese
- Korean
- Portuguese
- Spanish
- Swedish

See "Selecting a Supported Language" below for instructions on how to change the language of DocumentDirect's graphical user interface.

### *Using Scripts in Selected Languages*

Script commands are saved in the language that was selected at the time the script was recorded. As a result, scripts must be played back with the same language configuration under which they were created.

### *Formatting Numbers and Dates in Selected Languages*

The format of number and dates generated by DocumentDirect conforms to your Windows Regional Settings. The Windows Control Panel Regional Settings dialog lets you specify formats for numbers and dates. To do so, open the Windows Control Panel and select the

Regional Settings icon. Choose the number and date formats you want to use, and click **OK**.

## Archived Text Conversions

The document servers archive text in EBCDIC format. Each language has a code page that maps each EBCDIC code to a corresponding character. DocumentDirect displays text of supported languages by using a language-specific translation table that maps the EBCDIC code page to a Windows ANSI code page.

DocumentDirect converts between the following EBCDIC and ANSI code pages:

| <b>Language</b>       | <b>MVS EBCDIC<br/>Code Page</b> | <b>Windows ANSI<br/>Code Page</b> |
|-----------------------|---------------------------------|-----------------------------------|
| Chinese (Simplified)  | 837                             | 936                               |
| Chinese (Traditional) | 835                             | 950                               |
| Danish                | 277                             | 1252                              |
| English (British)     | 285                             | 1252                              |
| English (US)          | 037                             | 1252                              |
| French (Canadian)     | 037                             | 1252                              |
| French (Standard)     | 297                             | 1252                              |
| German                | 273                             | 1252                              |
| Italian               | 280                             | 1252                              |
| Japanese              | 930                             | 932                               |
| Korean                | 834                             | 949                               |
| Portuguese            | 037                             | 1252                              |
| Spanish               | 284                             | 1252                              |
| Swedish               | 278                             | 1252                              |

See "Selecting a Supported Language" below for instructions on how to change the active EBCDIC to ANSI translation table.

### *Support for the European Monetary Union Currency Sign*

DocumentDirect supports the ANSI/EBCDIC translation for the euro sign, the symbol for the European Monetary Union currency, when the following conditions are met:

- Fonts used on the workstation are capable of displaying the euro sign.
- For IBM/AFP and Xerox/DJDE reports, fonts supporting the euro sign are used.

## Selecting a Supported Language

To select a national language, open the Windows Control Panel before starting DocumentDirect, and select Regional Settings. Choose the language you want and click **OK**.

The language selected in the Windows Control Panel affects both the user interface and the translation table used for text conversions.

Note that some DocumentDirect dialogs, such as **File|Open**, use a common dialog which, due to Windows limitations, always appears in the language in which Windows was installed.

### *Japanese*

To select Japanese, you must run DocumentDirect on a Japanese Windows system. DocumentDirect supports all alphabets in Japanese, i.e., hiragana, kanji, and katakana. DocumentDirect displays the following in Japanese:

- ViewDirect archives created in Host-DBCS format.
- DocumentDirect menus, dialogs, help, and messages.
- All report names, section names, topic names, topic items, and Version IDs.

You can optionally hide Host-DBCS Shift-In and Shift-Out characters.

### *Chinese (Simplified or Traditional)*

To select Chinese, you must run DocumentDirect on a Simplified or Traditional Chinese Windows system. DocumentDirect displays the following in Chinese:

- ViewDirect archives created in Host-DBCS format.
- DocumentDirect menus, dialogs, help, and messages.
- All report names, section names, topic names, topic items, and Version IDs.

You can optionally hide Host-DBCS Shift-In and Shift-Out characters.

### *Korean*

To select Korean, you must run DocumentDirect on a Korean Windows system. DocumentDirect displays the following in Korean:

- ViewDirect archives created in Host-DBCS format.
- DocumentDirect menus, dialogs, help, and messages.



- All report names, section names, topic names, topic items, and Version IDs.

You can optionally hide Host-DBCS Shift-In and Shift-Out characters.

## Selecting a Non-Supported Language

To access documents in an unsupported language, you must create a customized translation table. A sample translation table, ANSIEBCD.TAB, is provided with DocumentDirect. This table maps ANSI Windows Latin 1 Code Page 1252 to US EBCDIC Code Page 37. The DocumentDirect administrator can copy and modify this table, or the translation table of a supported language that is similar to the unsupported language, so that the ANSI code page maps to the code page of the unsupported language. The ViewDirect administrator should provide the EBCDIC code page that was used for archive creation.

Note that DocumentDirect treats text following a semicolon as a comment and ignores blank lines. Follow these guidelines when creating a customized translation table:

- Create all archives for the same EBCDIC code page.
- Do not change the character mappings for characters 0 through 9, A through Z, and a through z.
- Enter each ANSI and EBCDIC correlation on a separate line.
- Sequentially order ANSI values.

To activate the customized translation table, select Override SBCS Translation Table on the User Preferences Text Viewing tab. Enter the path and name of the file containing the desired translation table.

---

## Enabling Options

---

DocumentDirect installation media contains the complete DocumentDirect system. However, not all DocumentDirect options may be enabled for your workstation. Your installation media contains an authorization code that determines which options are enabled.

## Displaying a List of Enabled Options

To display the list of options that are enabled for your workstation, open DocumentDirect and select **Help|About DocumentDirect**. An About DocumentDirect dialog, like the one shown in Figure C-1, lists the enabled options.

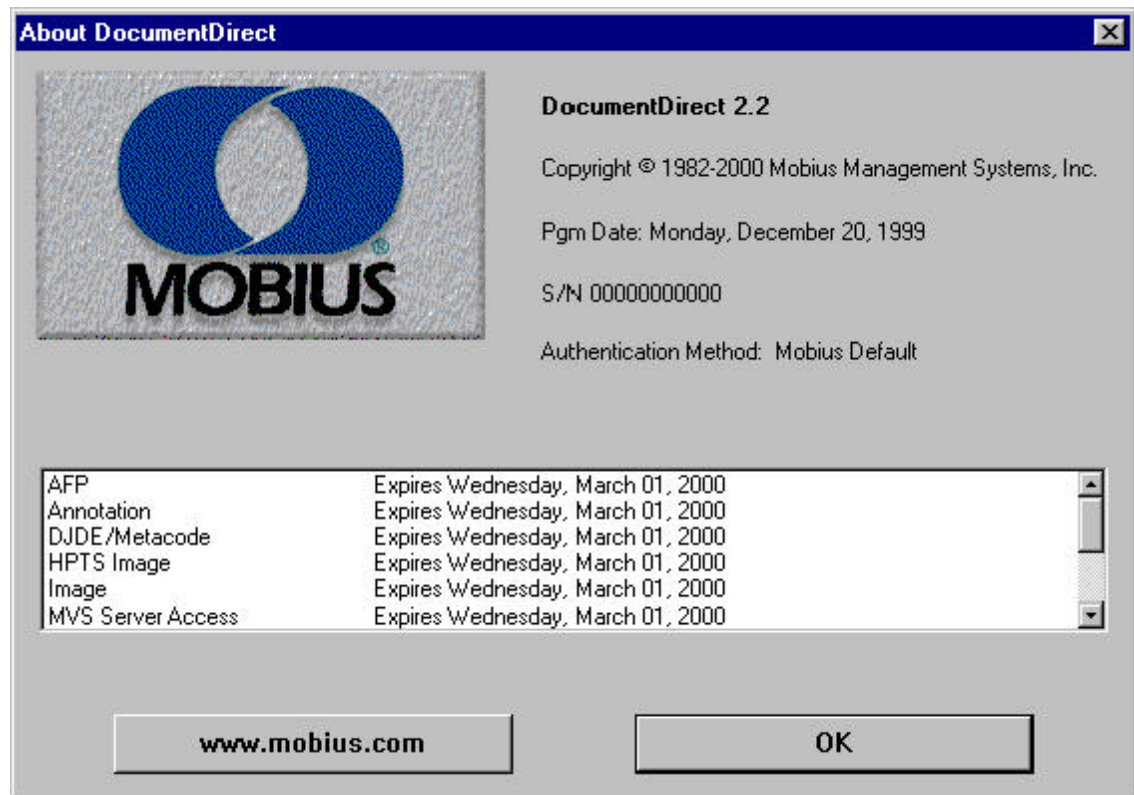


Figure C-1. Enabled Options

## Enabling Options

If you add options to DocumentDirect, update the authorization code as follows:

1. Contact Mobius and request a new authorization code.
2. Depending on the form in which you receive your new authorization code, do one of the following:

- If you receive a new LICENSE.DAT file in electronic form, simply replace your old LICENSE.DAT file with the new version.

OR

- If you receive your new authorization code by any other means, edit your existing LICENSE.DAT file, replacing the old authorization code with your new code. The authorization code is the 34-character string on the first line of LICENSE.DAT.

Be sure your LICENSE.DAT file is in the same directory as RDSWIN.EXE. Placing both files in the same directory enables the licensed options for all users of that DocumentDirect installation.

3. If you are updating options in DocumentDirect, delete the AuthorizationCode= line, which is located in the [MISC] section of your RDSWIN.INI file. If you are updating

options in DocumentDirect Application Suite, delete the AuthorizationCodeDdrapp= line.

4. Start DocumentDirect. DocumentDirect reads the new authorization code out of LICENSE.DAT and copies it to your RDSWIN.INI file. At this point, the newly licensed options are ready to use.

If your authorization code is located in a file with a name other than LICENSE.DAT, or if DocumentDirect cannot locate LICENSE.DAT, it displays an Authorization Code dialog similar to the one shown in Figure C-2. If this occurs, continue with Step 5.

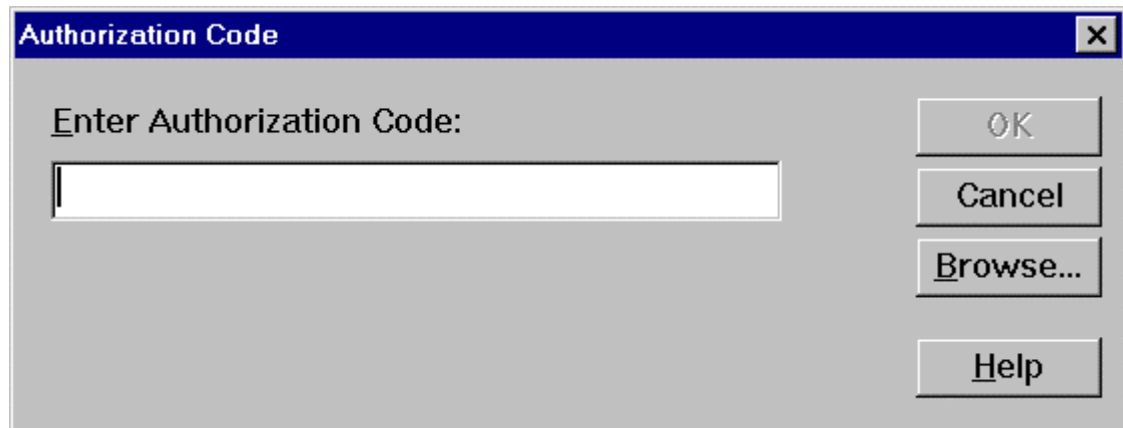


Figure C-2. Authorization Code Dialog

5. Type your new authorization code and click **OK**. If you do not know the code, do the following:
  - a. Click **Browse**. Locate and select the file containing the authorization code. The code appears in the **Enter Authorization Code** field.
  - b. To validate the code and write it to your RDSWIN.INI file, click **OK**. If you enter an invalid authorization code, a message informs you that it is not valid, and the parameter "DEMO" is written to the RDSWIN.INI file. In this case, repeat steps 3 through 5.

## Managing Document Servers

---

DocumentDirect allows you to create and manage discrete communication connections with specific ViewDirect document servers so that you can access the archives on those servers in accordance with previously-established topic or report access restrictions.

- If you are using DocumentDirect, the servers and network drives with which you have connections are displayed in the Document Explorer window.
- If you are using DocumentDirect Application Suite, you can search for documents on those servers with which you have connections and can create EnterpriseQueries which access those servers.

You can manage document servers and disk drive access in DocumentDirect's Document

Explorer window by:

- Adding document servers to the list or modifying existing entries in the list.
- Specifying the communications protocol used by a document server.
- Creating a copy of a document server in the list with a new name.
- Deleting document servers from the list.
- Reviewing the configuration of document servers in the list.
- Changing the order of the document servers in the list.
- Specifying which local or network drives you want to display in DocumentDirect's Document Explorer window.

These functions are described in the subsequent sections.

### Adding or Modifying Document Server Access

To add access to a document server or modify the configuration of an existing document server entry, perform the following steps:

1. Select **Options|Configure Document Servers** from the DocumentDirect menu. The dialog shown in Figure C-3 appears.

If you have not yet set up access for any document servers, this dialog is empty.

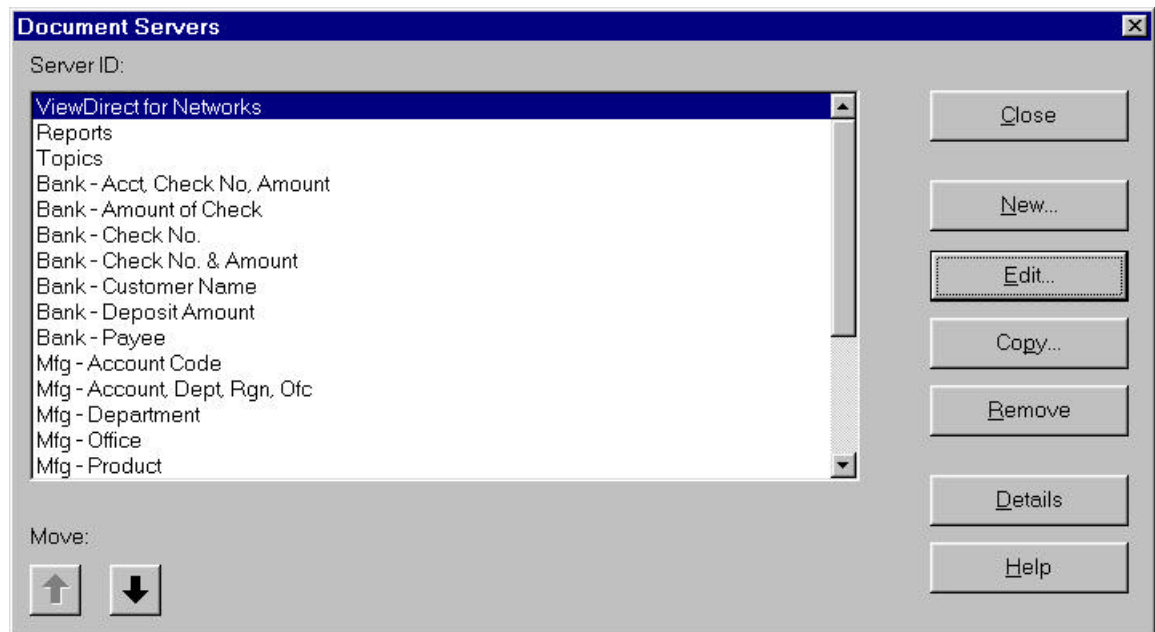


Figure C-3. The Document Servers Dialog

2. If you are adding access to a new document server, click **New....** Otherwise, highlight the name of the document server whose entry you want to modify, and click **Edit....** A dialog similar to the one shown in Figure C-4 appears.

**Note:** The **New...** and **Edit...** buttons are available only if you are licensed for document server access.

*Figure C-4. The Edit Document Server Access Dialog, TCP/IP Tab*

3. Depending on the type of document server for which you want to add or modify access, choose one of the following tabs:

| Tab    | Description                                                                                                                                                     |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPI-C  | Connect to a document server using CPI-C communications protocol. Available only if you are licensed for ViewDirect for MVS document server access.             |
| HLLAPI | Connect to a document server using HLLAPI communications protocol. Available only if you are licensed for ViewDirect for MVS document server access.            |
| TCP/IP | Connect to a document server using TCP/IP communications protocol. Available only if you are licensed for ViewDirect for MVS document server access.            |
| Remote | Connect to a document server hosted on a remote machine on your network. Available only if you are licensed for ViewDirect for Networks document server access. |

| Tab        | Description                                                                                                                                                                                 |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Network    | Connect to the Network Server ODBC data source created by ViewDirect for Networks. Available only if you are licensed for ViewDirect for Networks document server access.                   |
| Standalone | Open Document Archive Files (DAFs) stored in local directories. Available only if you are licensed for standalone server access. Use this type of document server only with DocumentDirect. |

4. Enter configuration information appropriate to the communications package you are adding or modifying. For a complete explanation of the fields in each dialog, see "Document Server Protocol Settings."
5. After you enter or change all of the appropriate information for the document server entry you are adding or modifying, click **OK**.
6. Close and restart. If you are using DocumentDirect, the document server you added appears on the left side of the Document Explorer window.

## Document Server Protocol Settings

The subsequent sections describe the settings for each supported communications protocol:

- CPI-C
- HLLAPI
- TCP/IP
- Remote
- Network
- Standalone

### *CPI-C Settings*

When you choose the CPI-C tab, the following dialog appears.

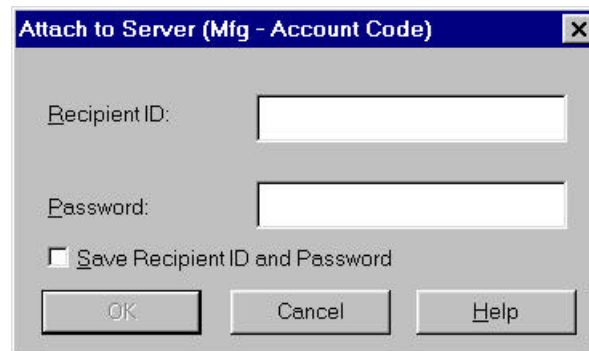
Figure C-5. The Edit Document Server Access Dialog, CPI-C Tab

Complete the following fields, as shown in Figure C-5:

| Field            | Description                                                                                                                                                                                                                             |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Server ID        | Name for the document server whose entry you are adding or modifying. This can be a descriptive name, such as "Main CPI-C Server."                                                                                                      |
| Product Name     | Name of the product providing CPI-C communications. Select from the drop-down list.                                                                                                                                                     |
| SIT Entry Name   | Name by which the destination server is identified in the CPI-C Side Information Table.                                                                                                                                                 |
| Product DLL Path | Name and full path of the DLL your CPI-C product uses to implement WinSocket calls. If you select "Standard 32-bit CPI-C Implementation" as the product name, the default DLL, WCPIC32.DLL, is displayed in the Product DLL Path field. |
| Recipient ID     | Recipient ID used to connect to the document server.                                                                                                                                                                                    |
| Password         | Password used to connect to the document server.                                                                                                                                                                                        |

| Field                                | Description                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prompt for Recipient ID and Password | Requires entry of Recipient ID and password each time you connect to the server. Your Recipient ID and password are entered in the Attach to Server dialog shown in Figure C-6.<br>If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out. |
| Allow Save Recipient ID and Password | Allows Recipient ID and password to be saved in the Attach to Server dialog shown in Figure C-6.<br>If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out.                                                                                |

If you select the Prompt for Recipient ID and Password and Allow Save Recipient ID and Password options, the Attach to Server dialog is displayed, as shown in Figure C-6. If you only select the Prompt for Recipient ID and Password option, the Attach to Server dialog is displayed without the Save Recipient ID and Password option.



*Figure C-6. The Attach to Server Dialog*

Enter your Recipient ID and password in the appropriate fields to connect to the server.

If you want the Attach to Server dialog to appear each time you connect, do not select the Allow Save Recipient ID and Password in the Edit Document Server Access dialog. The Attach to Server dialog will appear without the Save Recipient ID and Password option.

If you do not want the Attach to Server Dialog to appear each time you connect, select the Allow Save Recipient ID and Password in the Edit Document Server Access dialog. Then, select the Save Recipient ID and Password option in the Attach to Server dialog.

### *HLLAPI Settings*

When you choose the HLLAPI tab, the following dialog appears.



**Edit Document Server Access**

Server ID: ViewDirect for MVS

Protocol Settings:

CPI-C **HLLAPI** TCP/IP Network Remote Standalone

Product Name: Standard HLLAPI 32-bit

Procedure Name:

Session Name: A Transaction Name: IN20

Product DLL Path: EHLAPI32.DLL Browse...

Recipient ID: ADMIN

Password:

☒ Prompt for Recipient ID and Password

☐ Allow Save Recipient ID and Password

OK Cancel Help

Figure C-7. The Edit Document Server Access Dialog, HLLAPI Tab

Complete the following fields, as shown in Figure C-7:

| Field            | Description                                                                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Server ID        | Name for the document server whose entry you are adding or modifying. This can be a descriptive name, such as "Main HLLAPI Server."                                          |
| Product Name     | Name of the product providing HLLAPI communications. Select a product name from the drop-down list.                                                                          |
| Procedure Name   | HLLAPI or the procedure used to call HLLAPI.                                                                                                                                 |
| Session Name     | Letter that identifies the HLLAPI session under which communication is to be established. Enter values in uppercase.                                                         |
| Transaction Name | IN20. Enter values in uppercase.<br><b>Note:</b> If the name of your HLLAPI session running under CICS was modified in the CICS Program Control Table, enter that name here. |

| Field                                | Description                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product DLL Path                     | Name and full path of the DLL your HLLAPI product uses to implement WinSocket calls. If you select "Standard 32-bit EHLLAPI Implementation" for the product name, the default DLL, EHLAPI32.DLL, is displayed in the Product DLL Path field.                                                                                               |
| Recipient ID                         | Recipient ID used to connect to the document server.                                                                                                                                                                                                                                                                                       |
| Password                             | Password used to connect to the document server.                                                                                                                                                                                                                                                                                           |
| Prompt for Recipient ID and Password | Requires entry of Recipient ID and password each time you connect to the server. Your Recipient ID and password are entered in the Attach to Server dialog shown in Figure C-6. If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out. |
| Allow Save Recipient ID and Password | Allows Recipient ID and password to be saved in the Attach to Server dialog shown in Figure C-6. If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out.                                                                                |

### *TCP/IP Settings*

When you choose the TCP/IP tab, the following dialog appears.

**Edit Document Server Access**

Server ID: ViewDirect for MVS

Protocol Settings:

CPI-C   HLLAPI   **TCP/IP**   Network   Remote   Standalone

Host Name: Mobius

Service Name: VDRMVS61

Transaction Name: IN22

Product DLL Path: WSOCK32.DLL   [Browse...](#)

Recipient ID: ADMIN

Password:

☒ Prompt for Recipient ID and Password

☐ Allow Save Recipient ID and Password

OK   Cancel   Help

Figure C-8. The Edit Document Server Access Dialog, TCP/IP Tab

Complete the following fields, as shown in Figure C-8.

| Field            | Description                                                                                                                                                                          |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Server ID        | Name for the document server whose entry you are adding or modifying. This can be a descriptive name, such as "Main TCPIP Server."                                                   |
| Host Name        | IP Address of the document server, in either host name or dotted decimal format.                                                                                                     |
| Service Name     | Service name of the document server. This can be a service name or a port number.                                                                                                    |
| Transaction Name | IN22. Enter values in uppercase.<br><b>Note:</b> If the name of your communications session running under CICS was modified in the CICS Program Control Table, enter that name here. |
| Product DLL Path | Name and full path of the DLL your TCP/IP protocol stack uses to implement WinSocket calls. The default DLL is WSOCK32.DLL.                                                          |
| Recipient ID     | Recipient ID used to connect to the document server.                                                                                                                                 |
| Password         | Password used to connect to the document server.                                                                                                                                     |

| Field                                | Description                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prompt for Recipient ID and Password | Requires entry of Recipient ID and password each time you connect to the server. Your Recipient ID and password are entered in the Attach to Server dialog shown in Figure C-6.<br>If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out. |
| Allow Save Recipient ID and Password | Allows Recipient ID and password to be saved in the Attach to Server dialog shown in Figure C-6.<br>If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out.                                                                                |

### Remote Settings

When you choose the Remote tab, the following dialog appears.

**Edit Document Server Access**

Server ID: Manufacturing Inventory

Protocol Settings:

CPI-C   HLLAPI   TCP/IP   Network   **Remote**   Standalone

Protocol: TCP/IP

Host: VDRNT1   [Browse...](#)

Port Number: 1540

Document Server: ViewDirect for Networks

Recipient ID: ADMIN

Password:

☒ Prompt for Recipient ID and Password

☐ Allow Save Recipient ID and Password

OK   Cancel   Help

Figure C-9. The Edit Document Server Access Dialog, Remote Tab

Complete the following fields, as shown in Figure C-9.

| Field | Description |
|-------|-------------|
|-------|-------------|

| Field                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Server ID                            | Name for the document server whose entry you are adding or modifying. This can be a descriptive name, such as "Main Remote Server."                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Protocol                             | Protocol that DocumentDirect uses to communicate with the document server. Select a protocol from the drop-down list. You should select the same protocol that the document server is configured to use.                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Host                                 | <p>Identity of the machine that hosts the document server. The format of this field varies depending on the protocol you select. For more information, refer to the table below.</p> <p><b>Note:</b> If you select Local procedure call as the protocol, this field is optional.</p>                                                                                                                                                                                                                                                                                                                                                                                                  |
| Port Number/<br>Name/<br>Endpoint    | <p>Port number, pipe name, or endpoint used to communicate with the document server. The name of this field varies depending on the protocol you select.</p> <p>Typically, you do not need to fill in a value for this field, because DocumentDirect can determine the value by interacting directly with the host machine. However, under certain circumstances, this interaction may not be possible when a firewall separates the host machine from the machine on which DocumentDirect is running. In such cases, you need to specify a value for this field. Contact your ViewDirect for Networks administrator to determine the value that was set for the document server.</p> |
| Document Server                      | Host's name for the document server. Select a document server name from the drop-down list.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Recipient ID                         | Recipient ID used to connect to the document server.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Password                             | Password used to connect to the document server.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Prompt for Recipient ID and Password | <p>Requires entry of Recipient ID and password each time you connect to the server. Your Recipient ID and password are entered in the Attach to Server dialog shown in Figure C-6.</p> <p>If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out.</p>                                                                                                                                                                                                                                                                                                                              |

| Field                                | Description                                                                                                                                                                                                                                                 |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Allow Save Recipient ID and Password | Allows Recipient ID and password to be saved in the Attach to Server dialog shown in Figure C-6. If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out. |

Use the table below to determine the appropriate formats for the Host and Port Number/Name/Endpoint fields on the Remote tab, depending on which protocol you selected.

| Protocol             | Host Format                                                                               | Port Number/Name/Endpoint Format                                                                     |
|----------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| TCP/IP               | IP Address or machine name<br><br><b>Example:</b><br>128.10.2.30<br>or<br><i>myserver</i> | Port number<br><br><b>Example:</b><br>1540                                                           |
| Named pipes          | Machine name<br><br><b>Example:</b><br><i>myserver</i>                                    | Pipe name<br><br><b>Example:</b><br><u>\\somepipe</u><br><br>(Note that the initial \\ is optional.) |
| Local procedure call | N/A                                                                                       | N/A                                                                                                  |

### Network Server Settings

When you choose the Network tab, the following dialog appears.

Figure C-10. The Edit Document Server Access Dialog, Network Tab

Complete the following fields, as shown in Figure C-10:

| Field                                | Description                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Server ID                            | Name for the document server whose entry you are adding or modifying. This can be a descriptive name, such as "Main Network Server."                                                                                                                                                                                                       |
| Recipient ID                         | Recipient ID used to connect to the document server.                                                                                                                                                                                                                                                                                       |
| Password                             | Password used to connect to the document server.                                                                                                                                                                                                                                                                                           |
| Prompt for Recipient ID and Password | Requires entry of Recipient ID and password each time you connect to the server. Your Recipient ID and password are entered in the Attach to Server dialog shown in Figure C-6. If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out. |

| Field                                | Description                                                                                                                                                                                                                                                 |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Allow Save Recipient ID and Password | Allows Recipient ID and password to be saved in the Attach to Server dialog shown in Figure C-6. If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out. |

### Standalone Server Settings

When you choose the Standalone tab, the following dialog appears.

Figure C-11. The Edit Document Server Access Dialog, Standalone Tab

Complete the following fields, as shown in Figure C-11:

| Field              | Description                                                                                                                       |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Server ID          | Name for the document server whose entry you are adding or modifying. This can be a descriptive name, such as "Main DAFs Server." |
| Archive Files Path | Path of the directory where Document Archive Files (DAFs) are located.                                                            |
| Recipient ID       | Recipient ID used to connect to the document server.                                                                              |



| Field                                | Description                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Password                             | Password used to connect to the document server.                                                                                                                                                                                                                                                                                              |
| Prompt for Recipient ID and Password | Requires entry of Recipient ID and password each time you connect to the server. Your Recipient ID and password are entered in the Attach to Server dialog shown in Figure C-6.<br>If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out. |
| Allow Save Recipient ID and Password | Allows Recipient ID and password to be saved in the Attach to Server dialog shown in Figure C-6.<br>If you did not select the Save Encrypted Passwords option on the Security and Administrative tab of the Preferences dialog, this field appears grayed out.                                                                                |

## Copying Document Servers

To copy a document server, perform the following steps:

1. Select **Options|Configure Document Servers**. The dialog shown in Figure C-3 appears.
2. Highlight the document server you want to copy. Click **Copy....** A dialog like the one in Figure C-4 appears. All settings except the name are copied from the original document server.
3. Enter a name for the new document server. Modify other fields as necessary. Click **OK**.

## Deleting Document Servers

To delete a document server, perform the following steps:

1. Select **Options|Configure Document Servers**. The dialog shown in Figure C-3 appears.
2. Highlight the document server you want to delete. Click **Remove....**

## Reviewing Document Servers

To review the configuration of a particular document server entry, perform the following steps:

1. Select **Options|Configure Document Servers** from the DocumentDirect menu. The dialog shown in Figure C-3 appears.

2. Highlight the name of the document server you want to review.
3. Click **Details**. A dialog like the one shown in Figure C-12 appears. This dialog provides the details of the configuration for the document server you selected in step 2.

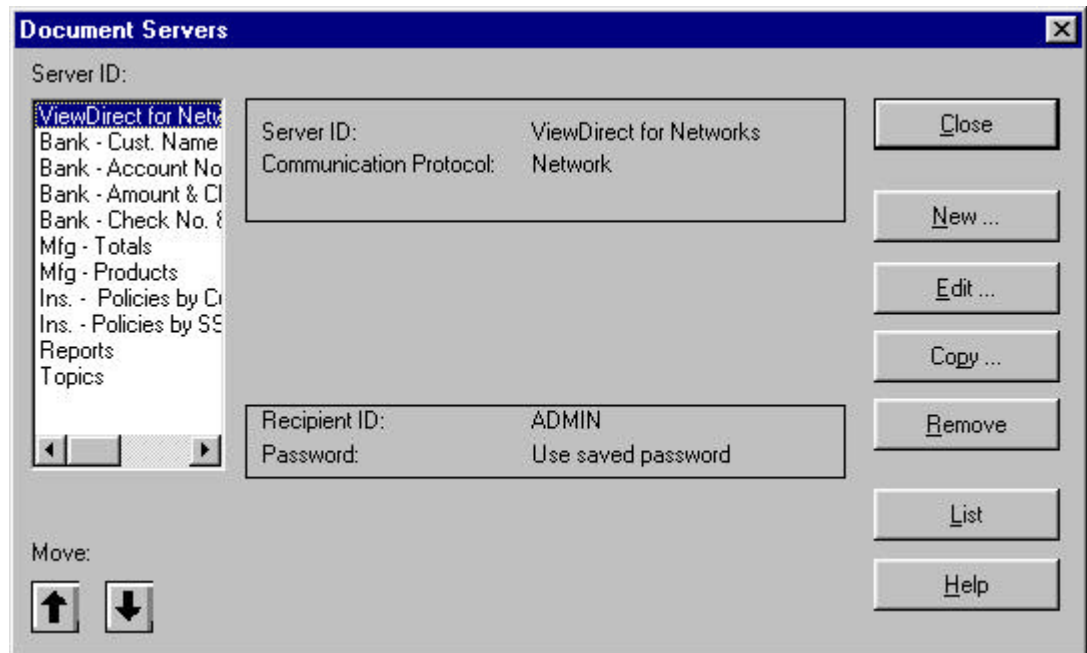


Figure C-12. The Document Servers Dialog, Showing Details

## Changing the Order of Document Servers

To change the order of document servers listed on the left side of the Document Explorer window, perform the following steps:

1. Select **Options|Configure Document Servers** from the DocumentDirect menu. A dialog like the one shown in Figure C-3 appears.
2. Highlight the name of the document server you want to move. Position it using the up and down arrow buttons in the lower left corner of the dialog window.
3. Close and restart Document Explorer.

## Specifying Drives

To present an accurate, complete list of the local or network storage drives in DocumentDirect's Document Explorer window, select **Options|Preferences...** from the DocumentDirect menu. In the Display Drives field of the Miscellaneous tab, specify the local and network drives you want to display. For details on setting user preferences, see Chapter C1.

In DocumentDirect Application Suite, the **Display Drives** field is disabled.

---

## Chapter C2. Configuring Communications

---

The client-server architecture of DocumentDirect supports three application programming interfaces (APIs) for communicating between the client and server. You can use any PC communications product that supports one of these APIs.

- **TCP/IP** – Transmission Control Protocol/Internet Protocol, an open standard for computer networking.
- **HLLAPI** – High-level Language Application Programming Interface supported by many Windows 3270 terminal emulation packages.
- **CPI-C** – Common Programming Interface for Communications, a standard communications interface designed to support APPC software and LU6.2 protocols.

See "Managing Document Servers" in Chapter C1 to be sure that you correctly configure document servers for your workstation.

### ***TCP/IP: Overview***

---

The Transmission Control Protocol/Internet Protocol (TCP/IP) is a set of peer-to-peer communications protocols designed to allow communication between networks regardless of the technologies implemented in each network. Systems using TCP/IP functions are logically paired in a client-server relationship. In general, TCP/IP requests are issued from the client, or local host, and forwarded through an Internet to the document server, or foreign host. The document server performs the function and returns the result to the client.

- **Client Architecture.** The DocumentDirect client conforms to the Microsoft WOSA (Windows Open System Architecture) initiative called Windows Sockets (WINSOCK). This allows DocumentDirect to operate with all TCP/IP implementations conforming to the same standard, regardless of vendor origin.
- **Server Architecture.** The ViewDirect for MVS document server uses an IBM implementation of BSD Sockets API. For a description of implementation of server communications through TCP/IP, see Appendix A of the *ViewDirect for MVS User's Guide*.

The ViewDirect for MVS document server, like any host in a TCP/IP network, is uniquely identified by the combination of an Internet Protocol (IP) address and a Port Number. The following sections discuss those components.

### **Internet Protocol (IP) Address**

Every host in a network has a unique IP address. The IP address contains a network portion identifying a specific network, and a host portion identifying a specific host on the network. The IP address can be specified in either dotted decimal format, for example, 192.0.2.2, or as

a host name, for example, the alias used instead of the decimal format name, such as MobiusHost. DocumentDirect automatically recognizes either address form. To specify the IP address for your document server, use the **Host Name** field of the New/Edit Document Server dialog.

The mapping between host names and IP addresses is maintained by either a Domain Name Server (DNS) or by the equivalent of UNIX's /etc/hosts file, which usually comes with the vendor's TCP/IP software. If you do not have a DNS, mapping is vendor-dependent. Ask your network administrator for your IP address.

## Port Numbers

Port numbers identify a specific service within the IP address. The TCP/IP Listener component of the service waits on the named port for incoming connections from a client. When it receives an incoming request from the client, it invokes the document server to establish a connection with the client. Therefore, to establish a connection, the client, that is, DocumentDirect, must specify the document server port number/service name.

- **CICS Viewing and Printing.** The port number of the document server under CICS is the port number defined for the IBM-supplied Listener transaction (CSKL). The Listener transaction is part of IBM's CICS TCP/IP socket interface.
- **VTAMAPPL.** The port number of the document server under VTAMAPPL is the port number specified in the TCPPORT parameter of the VTAMAPPL JCL. If you are running multiple VTAMAPPL address spaces, each address space must have a unique port number.

The document server port number can be specified in either decimal format, for example, 1540, or as a service name, the alias used instead of the decimal format name, such as "RDS". If you need to change the service name, that is, the port number, for your document server, use the **Service Name** field of the New/Edit Document Server dialog.

When using the service name, DocumentDirect issues a "getservicebyname(servicename);" socket function to retrieve the actual port number. In this case, the mapping of service names to port numbers is usually maintained through an equivalent of UNIX's /etc/services file, which usually comes with the vendor's TCP/IP software.

**Note:** The mapping between service names and port numbers could be vendor-specific.

As a convenience to the worldwide TCP/IP community, Mobius registered two port numbers and corresponding service names with the Internet Assigned Numbers Authority (IANA). Port number 1540 and service name RDS are reserved for use by a production version of the INFOPAC-RDS for MVS or ViewDirect for MVS document server. Port number 1541 and service name RDS2 are reserved for use in a test environment. Use of these port numbers is entirely optional.

Consult your network administrator for your document server's name/port number.

## Document Server Transaction Name

Under CICS, the IBM-supplied Listener routes requests to the correct document server by using the Transaction Name prepended to requests. The Transaction Name for your document server is set in the **Transaction Name** field of the New/Edit Document Server dialog. IN22 is the default value for this field. When the Listener receives an incoming request from DocumentDirect, it invokes the document server

transaction to process the request.

If the name of your communications session running under CICS was modified in the CICS Program Control Table, enter that name here. If you are connecting to a VTAMAPPL server, do not attempt to change your transaction name. Consult your ViewDirect administrator for your document server transaction name.

## Security Exit

The IBM TCP/IP Socket Interface has a sample security exit (EZACICSE). When this security exit is installed, the IBM Listener transaction invokes it for every incoming request. If you use the security exit, make sure that it passes DocumentDirect requests to the document server. The IBM TCP/IP security exit is not involved when running the VTAM version of the document server.

**Note:** The transaction name of the document server is available to the Security Exit at the time of request verification. You can code the Security Exit to allow a request to pass through if it has the transaction name of the document server, for example, "IN22".

## TCP/IP: Customization

---

This section provides the information necessary to use the TCP/IP protocol stack for DocumentDirect.

## Assumptions

This section assumes the following:

- You installed and verified the operations of the INFOPAC-RDS for MVS or ViewDirect for MVS CICS Viewing and Printing System. For more information, see Step 4 in Appendix A of the *INFOPAC-RDS for MVS* or *ViewDirect for MVS User's Guide*.
- You completed installation of DocumentDirect. See Appendix A for information on how to install DocumentDirect.
- One or more INFOPAC-RDS for MVS or ViewDirect for MVS document servers are executing and available for your use.
- You installed and verified the operations of your TCP/IP protocol stack.
- You know the service name or the port number and the transaction name of the document server.

## Configuring for TCP/IP

To prepare DocumentDirect to communicate with document servers using TCP/IP, complete the following steps:

1. Select **Options|Configure Document Servers**. Complete the Edit Document Server dialog with the TCP/IP tab as described in "Managing Document Servers" in Chapter C1. For product-specific parameters required for this dialog, see the appropriate product discussion later in this appendix.

2. Invoke DocumentDirect and follow the instructions for displaying documents, as described in Chapter 2.

## 16-Bit Support

DocumentDirect 2.2 does not support 16-bit communications packages. To use 16-bit communications packages, you need to install DocumentDirect 2.1 running under Windows 3.1 or 3.11, or OS/2 4.0.

DocumentDirect Application Suite 1.2 does not support 16-bit communications packages. To use 16-bit communications packages, you need to install DocumentDirect Application Suite 1.1 running under Windows 3.1 or 3.11, or OS/2 4.0.

## ***TCP/IP: Product-Specific Parameters***

---

A number of vendors, such as Distinct, FTP Software, NetManage, and Novell, provide TCP/IP support for Windows. Information in the following sections should be considered as guidelines only. Refer to the specific vendor's documentation or contact your ViewDirect administrator for exact details.

In general, when you enter the document server name in the **Host Name** field of the New/Edit Document Server dialog, make sure the host name can be mapped to its IP address. Mapping between host names and IP addresses can be accomplished by having a Domain Name Server (DNS) in your network. If you do not have a DNS, the mapping of host names to IP addresses is usually set in the product's configuration files.

When you specify the service name in the **Service Name** field of the New/Edit Document Server dialog, be sure that the service name is mapped to the port number. This mapping is usually set in the product's configuration files.

## ***TCP/IP: Distinct***

---

### **Product Description**

Distinct Corporation's TCP/IP product is called Distinct TCP/IP. The following files are required to run Distinct TCP/IP:

- WINSOCK.DLL
- SOCKET.DLL
- GHOST.EXE

These files are located in the directory where you installed the Distinct software. When Distinct is installed and configured, the configuration program creates a file called SOCKET.INI in the directory containing your Windows files. SOCKET.INI contains a [HOSTS] section that maps the host names and IP addresses. The document server host name and IP address must be in this file. You can modify the [HOSTS] section with the Host Define and Host Remove dialogs in CONFIG.EXE.

## Customization

The following is a sample [HOSTS] section in the SOCKET.INI file:

```
[HOSTS]
viginia=192.0.2.3
atlantis=192.0.2.2
rdsprod=192.0.3.8
```

During installation, Distinct automatically places a file named Services in the ETC subdirectory of the directory where Distinct is installed. Services maps the service names and port numbers. The mapping between the service names and port numbers used by your document server must be present in this file.

The following is a sample Services file:

```
rds      3001/tcp
tcpmux   1/tcp
echo     7/tcp
echo     7udp
```

If you use Distinct, enter the following in the New/Edit Document Server dialog:

- Server ID: User-defined
- Host Name: IP address of the document server
- Service Name: Service name of the document server
- Transaction Name: IN22
- Product DLL Path: *path*\WINSOCK.DLL

For a complete explanation of document server configuration, see "Managing Document Servers" in Chapter C1.

## ***TCP/IP: FTP Software***

---

### Product Description

The TCP/IP protocol stack from FTP Software, Inc., comes as two products: PC/TCP Network Software Kernel and PC/TCP OnNet Kernel. The PC/TCP Network Software Kernel is the Terminate and Stay Resident (TSR) version, while the PC/TCP OnNet Kernel is the 32-bit Windows Virtual Device Driver (VxD) version.

## Customization

The following DLLs are required to run PC/TCP software:

- WINSOCK.DLL
- PCTCPAPI.DLL

These files are located in the directory where you installed PC/TCP software. The installation program (PCTCP.EXE) creates a PC/TCP configuration file called PCTCP.INI in the same directory.

Specify a file that maps host names and IP address in the [PCTCP KERNEL] section of the PCTCP.INI file. The Host-table= line specifies the file, as shown below:

```
[PCTCP KERNEL]
host-table=c:\host.txt
```

The example above specifies that the file C:\HOST.TXT contains the mapping for document server host names and IP addresses. The following is an example of the contents of HOST.TXT:

```
192.0.2.3  virginia
192.0.2.2  atlantis
192.0.3.8  rdsprod
```

The mapping of service names and port numbers is contained in a file named Services, which is installed automatically in the same directory with the PC/TCP software. The mapping of service name and port number must be included in the Services file. A sample Services file is shown below:

```
echo          7/tcp    #Echo
echo          7/udp    #Echo
rds 3001/tcp   #mobius rds
```

You can specify the path for the Services file by including the line etc-dir=path in the [PCTCP GENERAL] section of the PCTCP.INI file. For example:

```
[PCTCP GENERAL]
etc-dir=c:\pctcp
```

**Note:** For OnNet Kernel v1.1, the routine to retrieve the mapping between service name and port number is case sensitive. Be sure that the entry for the **Service Name** field of the New/Edit Document Server dialog is capitalized identically to the Services file.

If you use FTP software, enter the following in the New/Edit Document Server dialog:

- Server ID: User-defined
- Host Name: IP address of the document server
- Service Name: Service name of the document server
- Transaction Name: IN22
- Product DLL Path: *path*\WINSOCK.DLL

For a complete explanation of document server configuration, see "Managing Document Servers" in Chapter C1.



## TCP/IP: NetManage

---

### Product Description

The TCP/IP communications stack for NetManage, Inc., is called NEWT. The following DLLs are required to run NEWT:

- WINSOCK.DLL
- NMPCIP.DLL
- NMLIB.DLL

These files are located in the directory where you installed NEWT, for example, c:\newt40.

### Customization

The mapping of the host names and IP addresses is contained in a file called Hosts, which is located in the directory where you installed NEWT. The document server host name and its IP address must be in the Hosts file. You can create and edit the Hosts file using the Custom application. A sample Hosts file is shown below:

|           |          |
|-----------|----------|
| 192.0.2.3 | virginia |
| 192.0.2.2 | atlantis |
| 192.0.3.8 | rdsprod  |

The mapping of service names and port numbers is contained in a file called Services, which is located in the directory where you installed NEWT. The mapping of service name to port number must be in the Services file. A sample Services file, that is network services, Internet style, is shown below:

|         |          |
|---------|----------|
| tcpmux  | 1/tcp    |
| echo    | 7/tcp    |
| echo    | 7/udp    |
| discard | 9/tcp    |
| discard | 9/udp    |
| rds     | 3001/tcp |

If you use NetManage, enter the following in the New/Edit Document Server dialog:

- Server ID: User-defined
- Host Name: IP address of the document server
- Service Name: Service name of the document server
- Transaction Name: IN22
- Product DLL Path: *path*\WINSOCK.DLL

For a complete explanation of document server configuration, see "Managing Document Servers" in Chapter C1.

**TCP/IP: Novell**

---

**Product Description**

Novell, Inc., provides a TCP/IP protocol stack called LAN WorkPlace for DOS and Windows. The following DLLs are required to run LAN WorkPlace:

- WINSOCK.DLL
- WLIBSOCK.DLL

These files are located in the directory where you installed the TCP/IP software, for example, c:\nwtcpip\bin.

**Customization**

The mapping of the host names and IP addresses is contained in a file called Hosts, which is located in the TCP subdirectory of the directory where you installed TCP/IP, for example, c:\nwtcpip\tcp\hosts. The document server host name and its IP address must be in the Hosts file. A sample Hosts file is shown below:

```
#IP addressHostname
127.0.0.1    virginia
192.0.2.1    atlantis
192.0.3.8    rdsprod
```

The mapping of service names and port numbers is contained in a file called Services, which is located in the TCP subdirectory of the directory where you installed the TCP/IP, for example, c:\nwtcpip\tcp\services. The mapping of service name to port number must be in the Services file. A sample Services file is shown below:

```
# Service Name      Port/Protocol Aliases

echo                7/tcp
discard             9/tcp
systat              11/7cp
daytime             13/tcp
rds                  3001/tcp
```

If you use Novell, enter the following in the New/Edit Document Server dialog:

- Server ID: User-defined
- Host Name: IP address of the document server
- Service Name: Service name of the document server
- Transaction Name: IN22
- Product DLL Path: *path*\WINSOCK.DLL

For a complete explanation of document server configuration, see "Managing Document

## ***HLLAPI: Overview***

---

The High Level Language Application Programming Interface (HLLAPI) makes it possible for DocumentDirect to communicate with an IBM MVS system through a Windows-based 3270 emulation program. Typically, such an emulation package uses an SNA communications protocol of LU2 or LU0.

Because of the nature of the Windows environment, DocumentDirect does not work with a DOS-based 3270 emulation package running in a DOS window. Your 3270 emulation program must support HLLAPI under Windows.

The dialog between DocumentDirect and the mainframe takes place in an area called a "presentation space." A HLLAPI application opens a session by connecting a presentation space. Each instance of a connection is called a "session."

### **Session IDs**

Your Windows 3270 emulation package may support a number of sessions at one time depending on your specific hardware and software configuration. For example, EXTRA! for Windows from Attachmate can support up to 26 sessions. Each session has a unique name, called the short session ID, that identifies the particular presentation space in which a function is to operate. Usually, the short session ID is a letter, such as A, B, C, and so on. These IDs are created during configuration of the HLLAPI program.

You need to know the short session ID of the session you are using when you connect to your mainframe's CICS system. Enter the short session name in the **Session Name** field of the New/Edit Document Server dialog.

## ***HLLAPI: Customization***

---

This section discusses the use of DocumentDirect with a 3270 emulation package that offers a high-level language application program interface, that is, HLLAPI. A number of vendors, such as IBM, Attachmate, WallData, and others, include HLLAPI support as part of their Windows 3270 emulation software.

### **Assumptions**

This section assumes the following:

- You installed and verified the operations of the INFOPAC-RDS or ViewDirect for MVS CICS and/or VTAM Viewing and Printing System. See Appendix A of the *INFOPAC-RDS for MVS* or the *ViewDirect for MVS User's Guide* for full information.
- You completed the installation of DocumentDirect. See Appendix A for information on how to install DocumentDirect.
- One or more INFOPAC-RDS for MVS or ViewDirect for MVS document servers are executing and available for your use.

- You installed and verified the operations of your 3270 emulation product, which has a high-level language application program interface, that is, HLLAPI.
- Users can log on to the CICS or VTAM server through the emulator.
- Users know the short session ID through which they logged on to CICS. This ID is defined as part of your 3270 emulation product.

## Configuring for HLLAPI

To prepare DocumentDirect to communicate with the document server using HLLAPI, complete the following steps.

1. Select **Options|Configure Document Servers**. Complete the HLLAPI tab dialog as described in "HLLAPI: Product-Specific Parameters."
2. If possible, set up your 3270 emulator to be configured as a Model 5, that is MOD5, terminal. Because the MOD5 buffer size is larger, this model makes the most efficient use of the communications API for DocumentDirect.
3. Before attempting to attach to the document server through DocumentDirect, start your emulation software and log on to CICS or VTAM.
4. Switch back to the DocumentDirect window and follow the instructions for opening documents as described in Chapter 2.

## 16-Bit Support

DocumentDirect 2.2 does not support 16-bit communications packages. To use 16-bit communications packages, you need to install DocumentDirect 2.1 running under Windows 3.1 or 3.11, or OS/2 4.0.

DocumentDirect Application Suite 1.2 and later versions do not support 16-bit communications packages. To use 16-bit communications packages, you need to install DocumentDirect Application Suite 1.1 running under Windows 3.1 or 3.11, or OS/2 4.0.

## HLLAPI: Product-Specific Parameters

---

A number of vendors, such as IBM, Attachmate, and Wall Data, provide HLLAPI products. For each of these products, you must specify the document server ID, product name, procedure name, session name, and the name and path of the product's DLL. Enter this information in the New/Edit Document Server dialog. The following table provides this information for each product.

| Product Name           | Procedure Name | Path                      |
|------------------------|----------------|---------------------------|
| Standard HLLAPI 32-Bit | HLLAPI         | <i>path</i> \EHLAPI32.DLL |
| EXTRA! 32-Bit          | HLLAPI         | <i>path</i> \EHLAPI32.DLL |

| Product Name    | Procedure Name | Path                      |
|-----------------|----------------|---------------------------|
| NetSoft 32-Bit  | WinHLLAPI      | <i>path</i> \WHLLAPI.DLL  |
| Nexus 32-Bit    | WinHLLAPI      | <i>path</i> \WHLLAPI.DLL  |
| PassPort 32-Bit | HLLAPI         | <i>path</i> \PASSHLL.DLL  |
| PCOM 32-Bit     | HLLAPI         | <i>path</i> \PCSHLL32.DLL |
| Rumba 32-Bit    | HLLAPI         | <i>path</i> \EHLAPI32.DLL |

For a complete explanation of document server configuration, see "Managing Document Servers" in Chapter C1.

---

## ***CPI-C: Overview***

The Common Programming Interface for Communications (CPI-C) was developed to provide a way for applications to use Advanced Program-to-Program Communication (APPC) from one processing platform to another. This section introduces what you need to know about CPI-C, APPC, and LU6.2 protocol to use DocumentDirect.

### **LU6.2 and APPC**

The INFOPAC-RDS for MVS and ViewDirect for MVS client-server architecture uses an SNA communications protocol known as LU6.2. Note that sometimes LU6.2 is referred to as APPC. Actually APPC includes only the platform-dependent verbs used to implement LU6.2. LU6.2 provides support for true distributed processing between two computers in a non-hierarchical environment. LU6.2 is ideal for the client-server architecture implemented within INFOPAC-RDS for MVS or ViewDirect for MVS and DocumentDirect.

There are two types of LU6.2:

- **Dependent LU6.2** - These LUs can only receive a BIND and support a single session between the document server and the connected client. Dependent LUs can be defined for either a PU2.0 or PU2.1.
- **Independent LU6.2** - These LUs can send or receive a BIND and support multiple parallel sessions between the document server and the connected client. Independent LUs require a PU2.1.

The number of sessions supported is a key difference between dependent and independent LUs, since there is a one-to-one relationship between LU6.2 sessions and viewing reports. Each report viewed in DocumentDirect requires a separate session. A single PC simultaneously viewing two document-server-controlled reports requires *two dependent LUs*.

On the other hand, since each independent LU supports a virtually unlimited number of sessions, a single PC can simultaneously view a virtually unlimited number of document-server-controlled reports using a *single independent LU*.

Whether you choose to use independent or dependent LU6.2 or both is entirely up to you. Your choice is most likely to be based on the combined configuration and administration

requirements of the following:

- Communications package used by the PC running DocumentDirect
- VTAM and NCP packages used by the mainframe system running the CICS INFOPAC-RDS for MVS or ViewDirect for MVS document server

## APPC and CPI-C

As introduced above, APPC is the software behind the LU6.2 protocols. APPC enables high-speed communications between programs on different computers, from portables and workstations to midrange and mainframe computers. It serves as the translator between application programs and the SNA network. Since APPC software is available for many different IBM and non-IBM platforms, it would seem to support the cross-platform communications needs of client-server computing. Unfortunately, each APPC platform has a slightly different implementation of APPC, making cross-platform support extremely difficult.

To further enhance the appeal of APPC, IBM developed a standard, cross-platform, application programming interface (API). This API is CPI-C, which provides for a common programming interface regardless of the underlying APPC implementation. CPI-C has received support from communications product vendors, including IBM, Microsoft, Attachmate, WallData, and others. In addition, CPI-C is endorsed by independent standards organizations such as X/Open.

By using the CPI-C API, DocumentDirect can use any PC communications program that adheres to the CPI-C standard. Using the communications package of your choice, the DocumentDirect client can communicate and exchange data with MVS servers running either of Mobius' document viewing products: INFOPAC-RDS for MVS or ViewDirect for MVS.

## CPI-C and DocumentDirect

This section provides a brief background on CPI-C terminology with specific emphasis on DocumentDirect. Many portions and capabilities of CPI-C are not discussed since they do not pertain to the operations of DocumentDirect.

Many hardware and software elements in the SNA environment are required in order for two programs to communicate with each other. Each program is associated with a logical unit. The LU is the means through which the program accesses the network. There are several types of LUs, and each LU type uses a specific protocol. CPI-C is supported by LU 6.2. Before two programs can communicate, their LUs must be connected through an LU-to-LU session: a logical connection between the two LUs.

DocumentDirect uses CPI-C API calls to drive the SNA communications platform provided on your PCs. Each call supplies parameters to CPI-C, which performs the desired function and returns parameters to DocumentDirect. In CPI-C terminology, DocumentDirect is referred to as the local program; the program at the other end of the LU6.2 connection is referred to as the partner program. Similarly, the LU serving DocumentDirect is the local LU; the LU serving the partner program is the partner LU. For the remainder of this topic, **local** refers to DocumentDirect while **partner** refers to the INFOPAC-RDS for MVS or ViewDirect for MVS document server.

For DocumentDirect to start a session with a document server, certain information must be provided to the communications program, for example, where the document server is located and how the data travels back and forth. The CPI-C standard provides this information in side

information tables. The best way to conceptualize the side information table is to think of it as a keyed file containing communication parameters. Each record in the table contains user specified parameters controlling a specific communication session. Your PC's SNA communication package provides facilities to build side information tables. The side information tables are usually maintained by your network administrator.

The following table provides a discussion of the typical side information requirement of CPI-C. In addition to standard CPI-C data items, many communications products use the side information table to capture parameters specific to their own needs; such parameters are not described in the following table.

| Field                     | Description                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Symbolic destination name | If you think of the side information table as a keyed file, this is the key field. The symbolic destination is a shorthand way of identifying the names of the various document servers along with the communications parameters required to access them. The name length can be up to 8 characters.                                                                                             |
| Local LU name             | Name by which the local LU is known. It can be up to 8 characters or a fully qualified network name of up to 17 characters. This is a VTAM LU such as T3918101. If the fully qualified name is required, prefix the LU with the appropriate SNA network name, for example, MMS000.T3918101.                                                                                                      |
| Local program name        | Name of the DocumentDirect program (RDSWIN.EXE). Most implementations require entry of only the program name (RDSWIN) without the extension (EXE).                                                                                                                                                                                                                                               |
| Partner LU name           | Name by which the partner LU is known to the local program. It can be up to 8 characters or a fully qualified network name of up to 17 characters. This is the VTAM application ID (APPLID) of the document server as defined at your site, for example, RDSPROD. If the fully qualified name is required, prefix the APPLID with the appropriate SNA network name, for example, MMS000.RDSPROD. |
| Partner program name      | Name of the program that the local program talks to, sometimes also called the transaction program name (TPNAME). This is the name of the INFOPAC-RDS for MVS and ViewDirect for MVS document server. For the document server running under CICS, the name is IN20 unless it has been modified by your installation.                                                                             |

| Field                         | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mode name                     | Name representing a set of communication parameters to be used in the LU-to-LU session. The mode name can contain up to 8 characters. The session's mode is a set of networking characteristics that determines how data moves between the two LUs. This mode name <i>must</i> be defined and accessible to the VTAM system servicing the document server.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Session Contention            | Some implementations require the definition of session contention parameters. Due to the nature of client-server application, contention is not an issue. Set any parameter dealing with contention to zero.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Session Limits                | Maximum number of concurrently active sessions allowed between the local and remote LUs. This defines the maximum number of report viewing windows that DocumentDirect can open for the single LU-to-LU connection. For dependent LU connections, this must be 1. For independent LU connections, almost any positive number is supported. Note that two sessions are dedicated to the SNA service manager (SNASVCMG). In some implementations, for example, Novell NW4SAA, these two SNASVCMG sessions are included in the session limits specified in the side information table. In other implementations, the SNASVCMG sessions are not included in the session limits. Check your vendor's documentation to see how these limits are set. Also, consult with your ViewDirect administrator for more information concerning how to define this field. Note that the local and remote session limits should have the same value. |
| Conversation security type    | Indicates whether CPI-C security is used and, if so, what type. This form of security is not implemented within DocumentDirect. DocumentDirect security is performed by the document server. Set conversation security to NONE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Security user ID and password | These fields are not used by DocumentDirect since conversation security is not required. Typically they should be left blank.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Character Set                 | DocumentDirect supports an ASCII character set composed of lowercase a through z; uppercase A through Z; numerics 0 through 9; and special characters \$, #, @, and period (.). The document server uses an EBCDIC character set. Character set conversion is handled as part of the application. Do not enable CPI-C character set conversion.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |



## ***CPI-C: Customization***

---

This section provides information about how DocumentDirect interacts with various PC SNA communications products. While DocumentDirect supports all SNA communications packages that provide a CPI-C compliant interface, it is impossible to provide detailed customization tips for all SNA communications products. The following examples are merely representative of how communications products, in general, can be installed.

This information supplements, but does not replace, the documentation that accompanies your communications program. Before proceeding with your customization, refer to the instructions accompanying your communication product for configuration information that covers your hardware and operating environment in greater detail.

### **Assumptions**

The following customization sections assume:

- You installed and verified the operations of the INFOPAC-RDS for MVS or ViewDirect for MVS CICS Viewing and Printing System. See Step 4 in Appendix A of the *INFOPAC-RDS for MVS* or *ViewDirect for MVS User's Guide* for full information.
- You installed and verified the operations of the INFOPAC-RDS for MVS or ViewDirect for MVS document server component. See Step 7 in Appendix A of the *INFOPAC-RDS for MVS* or *ViewDirect for MVS user's guide* for full information.
- One or more INFOPAC-RDS for MVS or ViewDirect for MVS document servers are executing and available for your use.
- You completed the installation of DocumentDirect. See Appendix A for information on how to install DocumentDirect.
- You installed and verified the operations of your SNA communication product.

### **Configuring for CPI-C**

To prepare DocumentDirect to communicate with the document server using CPI-C, complete the following steps.

1. Select **Options|Configure Document Servers**. Complete the Edit Document Server dialog, with the CPI-C tab as described in "Managing Document Servers" in Chapter C1.
2. Switch back to DocumentDirect and follow the instructions for opening documents, described in Chapter 2.

**Note:** Some CPI-C products require that you start APPC before you can connect to a document server.

## 16-Bit Support

DocumentDirect 2.2 does not support 16-bit communications packages. To use 16-bit communications packages, you need to install DocumentDirect 2.1 running under Windows 3.1 or 3.11, or OS/2 4.0.

DocumentDirect Application Suite 1.2 and later versions do not support 16-bit communications packages. To use 16-bit communications packages, you need to install DocumentDirect Application Suite 1.1 running under Windows 3.1 or 3.11, or OS/2 4.0.

## ***CPI-C: Product-Specific Parameters***

---

A number of vendors, such as IBM, Attachmate, and WallData, provide CPI-C products. Information on configuring these products to work with DocumentDirect is provided in the following sections. This information should be considered as guidelines only. Refer to the specific vendor's documentation or contact your ViewDirect administrator for exact details.

For each of these products, you must specify the Server ID, product name, SIT entry name, and the name and path of the product's DLL. This information is entered in the New/Edit Document Server dialog. The following sections provide this information for each product.

## ***CPI-C: Standard CPI-C 32-Bit***

---

Use standard CPI-C 32-bit for communications packages that require CPI-C 32-bit protocol.

Enter the following information in the New/Edit Document Server dialog:

- Server ID: User-defined
- Product Name: Standard CPI-C 32-Bit
- SIT Entry Name: User-defined
- Product DLL Path: Defined by CPI-C product

For a complete explanation of document server configuration, see "Managing Document Servers" in Chapter C1.

## **Chapter C3. Configuring LPFD**

---

Laser Printer Formatted Documents (LPFD) refers to IBM AFP, Xerox DJDE/Metacode, Adobe PostScript, Adobe PDF, or Hewlett-Packard PCL format. This appendix explains the following:

- Viewing and Printing LPFD Documents
- Correlating AFP Fonts to Windows Fonts
- Correlating Xerox DJDE/Metacode Fonts to Windows Fonts
- Controlling LPFD Resolution

- Viewing and Printing Color Components of LPFDs

## Viewing and Printing LPFD Documents

LPFD documents require resources that control how fonts appear when you view or print the documents. The first time an LPFD report is downloaded from the document server, these resources are downloaded along with the data. DocumentDirect writes the resources to local directories and uses the downloaded resources when they are needed again. LPFD reports display correctly even if these resources are not written to local directories, but performance suffers because the resources must be downloaded every time the report is opened.

If you use LPFDs, we recommend that you create AFP, DJDE, Postscript/PDF, and PCL resource directories where the resources for those formats can reside. The user either needs write access to those directories or you must copy all necessary IBM AFP, Xerox DJDE/Metacode, Adobe Postscript, Adobe PDF, and Hewlett-Packard PCL resources to those directories. See the section "Setting User Preferences" in Chapter C1 for information on creating AFP, DJDE, Postscript/PDF, and PCL resource directories.

If these resources are not available or you do not wish to use the original fonts, you can substitute Windows fonts by correlating the AFP or Xerox/DJDE Metacode fonts to Windows fonts in a font correlation table.

To view or print AFP outline fonts, you must either have Adobe Type Manager installed, or you must correlate the outline fonts to a Windows font.

## Correlating AFP Fonts to Windows Fonts

DocumentDirect can print or display AFP documents using the original AFP fonts or Windows fonts. Correlate AFP fonts or font families to Windows fonts or font families for the following reasons:

- If the AFP fonts are either not available or are AFP outline fonts and Adobe Type Manager is not installed. Using Windows fonts ensures that the AFP document still displays and prints correctly.
- To improve the viewing quality of AFP documents. Because Windows TrueType fonts are scaleable in a Windows environment, using them instead of the original AFP fonts improves the viewing quality of AFP documents.

Each AFP font belongs to a font family, or typeface, such as Sonoran Sans Serif. A single font family usually includes many individual fonts that differ in style, size, and weight. AFPFCOR.TAB contains correlation information for AFP fonts and the font families. It is stored in the directory specified in the AFP Resource Cache Path field of the LPFD Viewing tab and can be edited with any text editor. You can correlate AFP fonts or font families to Windows fonts or font families by specifying information in the sections of AFPFCOR.TAB as follows:

| To correlate...                                 | Update this AFPFCOR.TAB Section |
|-------------------------------------------------|---------------------------------|
| A default AFP font or to specify other defaults | [Defaults]                      |
| An AFP font family                              | [AFP Font Family]               |

| To correlate... | Update this AFPFCOR.TAB Section |
|-----------------|---------------------------------|
| An AFP font     | [CharSet]                       |

The sections of AFPFCOR.TAB are described below.

#### [Defaults]

This section specifies the default Windows font to be used to display or print AFP documents that contain the following:

- A default AFP font
- AFP fonts that are not available to DocumentDirect and are not correlated to Windows fonts in another section of AFPFCOR.TAB
- AFP outline fonts that are not correlated to Windows fonts in another section of AFPFCOR.TAB

Every AFP printer has a default font setting. Therefore, documents that do not specify an AFP font might print differently on different AFP printers, depending on the printer's default font. The [Defaults] section contains parameters that correlate the default AFP font to a Windows font.

Specify the default Windows font as follows::

```
FONT=Windows font family, point size, bold, italic, underline
```

where the parameters are described as follows:

| Parameter           | Description                                                                                                                                               |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Windows font family | Name of a Windows font family. If you enter a name other than one of those listed in the Fonts section of the Windows Control Panel, Courier New is used. |
| point size          | Character height. The default is 10 point. If you specify point size, it must immediately follow Windows font family.                                     |
| bold                | Characters are in bold.                                                                                                                                   |
| italic              | Characters are in italics.                                                                                                                                |
| underline           | Characters are underlined.                                                                                                                                |

The following is a sample [Defaults] section :

```
[Defaults]
```

```
FONT=Arial, 10, bold
```

If you omit the [Defaults] section or leave it empty, Courier New 10 point is the default font. If the original AFP font is an outline font and you omit the [Defaults] section or leave it empty, the default typeface is Courier New and the style, size, and weight are those of the original AFP outline font.

### [AFP Font Family]

This section correlates AFP font families to Windows font families. Specify the font family correlation as follows:

```
AFP font family=Windows font family
```

The following is a sample [AFP Font Family] section:

```
[AFP Font Family]
Sonoran Sans Serif=Arial
Letter Gothic=Courier
```

You can correlate multiple AFP font families to a single Windows font family by using one or more wildcard characters at the end of an AFP font family name. Use an asterisk (\*) to match any number of characters, or use a question mark (?) to match any single character. You can specify wildcard characters only at the end of an AFP font family name. For example, if you specify Sonoran\*=Arial, all AFP font families that start with the string "Sonoran," such as Sonoran Sans Serif and Sonoran Petite, are correlated to the Windows font Arial.

### [CharSet]

This section correlates individual AFP fonts to Windows fonts. Each AFP font has an associated character set. The character set contains the name of each character and information on how to draw it. To correlate an AFP font to a Windows font, you must specify the AFP font's character set and the Windows font as follows:

```
AFP font character set=Windows font
```

All character sets used in a document are listed in the INAFPMMSG file, which is produced when the document is processed on the host. Look for all occurrences of message 01621. The text of the message indicates resource type, such as character set, and the name of the resource.

The following is a sample [CharSet] section:

```
[CharSet]
ClPN110E=Post Net Normal
COD0GT10=Letter Gothic
COD0GT18=Letter Gothic
```

You can correlate multiple AFP character sets to a single Windows font by using one or more wildcard characters at the end of an AFP character set name. Use an asterisk (\*) to match any number of characters, or use a question mark (?) to match any single character. You can specify wildcard characters only at the end of an AFP character set names. For example, if you specify COD0GT??=Letter Gothic, all AFP character sets that start with the string "COD0GT" and end with another two characters, such as COD0GT10 and COD0GT18, are

correlated to the Windows font Letter Gothic.

## Correlating AFP DBCS Fonts to Japanese Windows Fonts

AFP DBCS fonts can consist of up to 40 sections, where each section can use one font family and one character set. You can correlate AFP DBCS fonts, font families, and character sets to Japanese Windows fonts by specifying information in the sections of AFPFCOR.TAB as follows:

| To correlate...         | Update this AFPFCOR.TAB Section |
|-------------------------|---------------------------------|
| An AFP DBCS font family | [AFP Font Family]               |
| An AFP DBCS font        | [CharSet]                       |

To correlate an AFP DBCS font or font family to a Japanese Windows font, use one of the following methods:

- Specify part of the font family name with a wildcard character in the [AFP Font Family] section of AFPFCOR.TAB. For example, to correlate fonts whose font family names start with the string "Kanji" to the Japanese Windows font MS Mincho, add the following entry to the [AFP Font Family] section of AFPFCOR.TAB:

```
KANJI*=MS Mincho
```

- Specify a font family name of any section of the AFP DBCS font. For example, to correlate a Kanji 2828 font to the Japanese Windows font MS Mincho, add the following entry to the [AFP Font Family] section of AFPFCOR.TAB:

```
KANJI 2828 Section 41=MS Mincho
```

- Specify the character set name of any section of the AFP DBCS font. For example, to correlate a font that has a section containing the C0M32F41 character set to the Japanese Windows font MS Mincho, add the following entry to the [CharSet] section of AFPFCOR.TAB:

```
C0M32F41=MS Mincho
```

Many DBCS character set names differ only in the last two characters. For these names, you can use wildcard characters in the character set name.

To correlate a font that has character set names beginning with C0M32F to the Japanese Windows font MS Mincho, add the following entry to the [CharSet] section of AFPFCOR.TAB:

```
C0M32F*=MS Mincho
```

## Correlating Xerox DJDE/Metacode Fonts to Windows Fonts

DocumentDirect can print or view Xerox reports using Windows TrueType fonts or the original Xerox DJDE/Metacode fonts. To use an equivalent Windows font, you must have a font correlation table like the one shown below.

Some Xerox fonts contain encrypted information. DocumentDirect cannot display these fonts. However, you can correlate the Xerox font to a similar Windows font. While there can be minor differences in shape and spacing when you use a correlated font, clarity is retained as the image is enlarged or shrunk. Non-correlated fonts, on the other hand, exhibit no variation in shape and spacing, but lose clarity as the image is scaled. Mobius recommends correlating Xerox fonts to Windows TrueType fonts because TrueType fonts are generally easier to read when scaled.

The font correlation table can also be used to translate one character to another within the Xerox font. This is useful for national character sets not supported by DocumentDirect. In these cases certain characters may be transposed in the viewed document, and font correlation may be used to correct the problem.

Xerox DJDE/Metacode font correlation information is stored in a file named DJDEFCOR.TAB, which is stored in the directory specified in the DJDE Resource Cache Path field of the Preferences dialog, with the LPFD Viewing tab. DJDEFCOR.TAB can be edited with any text editor.

### Sample Xerox DJDE/Metacode Font Correlation Table

```
*****
* V 1.2 - 11 May 94
*
*****
***
*** Translation Tables
***
*** (sample table to translate 1s to 2s)
```

```
*** Note that translation table values are hexadecimal ASCII character values.
*** The value on the left, when encountered in data, will be replaced with the
*** value on the right. ***
```

```
*** <TRANTAB> PRTRAN
*** 31=32
***
*** <FCORTAB>
*****
***
*** Metacode to Windows Font Table
***
*** non-blank Column 1 == comment record
***
*** Note: It is more efficient for the table to be in alpha order
***
*** ! represents optional field
***
*** Xfont0 == Xerox font name with 0 degree rotation (Portrait)
*** (An asterisk [*] indicates the default font is used)
*** Xfont90 != Xerox font name with 90 degree rotation (Landscape)
*** Xfont180 != Xerox font name with 180 degree rotation (I-Portrait)
*** Xfont270 != Xerox font name with 270 degree rotation (I-Landscape)
***
*** Note: When using font correlation, the rotation assigned to each of the
*** fonts defines the direction of the line (Escapement), and
*** the direction the character is drawn (Orientation). Therefore, both
*** directions will be the same. For example, you cannot have a portrait
*** line with landscape characters,
***
***
***
*** TRANTB != Translation table, Metafont-to-Windows font
```

```

***
*** B      == Windows font is bold if non-blank.
*** I      == Windows font is italic if non-blank
*** U      == Windows font is underline if non-blank
*** S      == Windows font is strikethrough if non-blank

```

```

***
*** Pt.Siz != Point size of Windows font

```

```

***      (When point size is not specified, the original Xerox font
***      height is used to determine the point size of the Windows font)

*** Font  == Windows font name
***      (An asterisk [*] indicates the Xerox font's raster image
***      is used)
***
*
*
* Xerox Fonts in 4 rotations      Trans  Flags  Windows Font
* -----!!!!!!-!!!!!!-!!!!!!  !!!!!  ! ! ! ! -----
* XFont0 XFont90 XFont180 XFont270  TRANTB  B I U S  Pt.Siz  Font Name
* =====
*
*
* L0211B L0211A L0211C      10      Arial
* L0212B L0212A L0212C      10      Arial
*
* PR107B PR107A PR107C      6.83     Times New Roman
* PR107E PR107B PR107F      6.83     Times New Roman
* PR110B PR110A PR110C      9.75     Times New Roman
* PR110E PR110B PR110F      9.75     Times New Roman
* PR111B PR111A PR111C      10.73    Times New Roman
* PR114B PR114A PR114C      13.65    Times New Roman
* PR118E PR118B PR118F      17.55    Times New Roman
* PR124E PR124B PR124F      23.40    Times New Roman
*
* PR207B PR207A PR207C      B        6.83     Times New Roman
* PR207E PR207B PR207F      B        6.83     Times New Roman
* PR210B PR210A PR210C      B        9.75     Times New Roman
* PR210E PR210B PR210F      B        9.75     Times New Roman
* PR211B PR211A PR211C      B       10.73    Times New Roman
* PR211E PR211B PR211F      B       10.73    Times New Roman

```

## Controlling LPFD Resolution

The resolution of LPFD images is largely a function of the number of pixels or dots-per-inch (dpi) used to generate the image. The larger the number of dpi available for viewing and printing, the sharper and clearer the image. The dpi available to any application, including DocumentDirect, is limited by the hardware and Windows device drivers.

### Printing Resolution

DocumentDirect is limited to printing the number of dpi provided by the current printer driver. As the following table demonstrates, many Windows printer drivers provide more dpi than the original printers used to print the LPFD documents in their native IBM/Xerox environments. This means that LPFD documents printed by DocumentDirect on an HP LaserJet IV look clearer and sharper than the same document printed on the native IBM/Xerox printer.

| Printer Type                 | Resolution     |
|------------------------------|----------------|
| IBM AFP printers             | 240 or 300 dpi |
| Xerox DJDE/Metacode printers | 300 dpi        |
| HP LaserJet III PCL printers | 300 dpi        |
| HP LaserJet IV PCL printers  | 300 or 600 dpi |



| Printer Type           | Resolution     |
|------------------------|----------------|
| HP PostScript printers | 300 or 600 dpi |

To improve printing resolution, you can do the following:

- Increase dpi - Use the highest dpi supported by the current printer driver, or change to a printer driver supporting a higher dpi rating. To verify the current resolution, use the Printer option in the Windows Control Panel. Note that there is a performance tradeoff in moving to a higher dpi. A dpi of 600 requires up to 4 times more memory than 300 dpi and requires slightly greater CPU resources, leading to slightly longer response times.

### Viewing Resolution

Viewing resolution is limited to the number of dpi supported by the video driver. As the following table demonstrates, all Windows video drivers support fewer dpi than Windows printer drivers. This means that viewed images often look inferior to printed images. This is outside the control of any application, including DocumentDirect.

| Video Type                                  | Resolution |
|---------------------------------------------|------------|
| VGA (640x480)                               | 96 dpi     |
| SVGA* - All size variants using Small Fonts | 96 dpi     |
| SVGA - All size variants using Large Fonts  | 120 dpi    |

- \* SVGA includes all size variants, such as 1280x1024, 1024x768, and 800x600.

To improve viewing resolution, do the following:

- Increase dpi - Use a video driver with a higher dpi rating. To verify the current resolution, use the Windows Setup program. Note that there is a performance tradeoff in moving to a higher dpi. A dpi of 120 requires almost twice as much memory as 96 dpi and requires proportionally greater CPU resources, leading to slightly longer response times.
- Correlate Fonts - To improve font clarity, you can use the font correlation tables to force the use of Windows fonts instead of the native fonts used to print the LPFD documents. Windows fonts, especially TrueType and Adobe Type 1 fonts, are vector fonts designed to display sharply and crisply at the lower dpis supported by the video drivers. The native LPFD fonts are raster fonts meant for printing and do not scale as well to the limits of video drivers. A side benefit of font correlation is that slightly fewer CPU resources are need to manipulate Windows fonts, leading to slightly shorter response times.
- Activate High Resolution Mode - DocumentDirect supports two LPFD viewing modes: *normal* and *high resolution*. Because there is a trade off between response time and display quality, by default DocumentDirect uses the normal LPFD viewing mode. The effects of high resolution viewing are most noticeable when rescaling the image to larger or smaller sizes. See the section "Setting User Preferences" in

## Viewing and Printing Color Components of LPFDs

DocumentDirect displays and prints LPFDs that contain color in black and white only. However, color printing of LPFDs is supported by ViewDirect for MVS printers for which those documents were designed.

## Chapter C4. Carriage Controls in Downloaded Reports

---

When you download a report to your local Windows environment, you may need to convert it. For example, the report on the mainframe may be in Variable Block, Machine (VBM) carriage control format and require conversion to ASCII format for use in Windows.

If you use the **Export to ASCII** option on the DocumentDirect File menu to save reports to a file, *do not* use CC\_CNVT.EXE to convert the file.

In general, there are two ways to convert files:

- Use the Micro to Mainframe link program. Many such programs offer carriage control conversion.

**Note:** If your download program converts carriage control characters, you do not need to use CC\_CNVT.EXE. For more information on using your link system to convert file formats, check your micro-to-mainframe link documentation.

- Use the CC\_CNVT.EXE program provided with DocumentDirect.

### Carriage Control Conversion: CC\_CNVT.EXE

Mainframe application programs use carriage controls to position the paper when printing reports. ViewDirect for MVS, for example, the companion mainframe report distribution product, produces reports that use such carriage controls. When you download such reports to the PC, using a conversion program, these codes are not interpreted by the PC as codes that control paper position during printing and pagination during screen displays. Some additional conversion is necessary.

If you find that your downloaded reports do not display page breaks properly when you are viewing or the line and page breaks are incorrect when you print, you need to convert the carriage controls by using the CC\_CNVT.EXE program.

### CC\_CNVT Assumptions

CC\_CNVT assumes the following for any file it converts:

- The original mainframe has been converted to ASCII using the IND\$FILE standard EBCDIC to ASCII Language Translation Table or equivalent.
- The original conversion to ASCII inserted a carriage return (CR) and line-feed (LF) at the end of each line.

With download programs such as IBM's IND\$FILE, you can select ASCII and CR/LF as options when you download the file. To use CC\_CNVT.EXE, type the following at the DOS prompt and press ENTER:

```
CC_CNVT filename newname
```

For filename, substitute the name of the file you need to convert. For newname, substitute the name you want for the converted file. If necessary, supply the DOS path for either or both files. You can include the CC\_CNVT command in the LINK parameter file that you use when downloading files.

The following table summarizes the conversions made by CC\_CNVT, showing the following:

- Hexadecimal EBCDIC (IBM mainframe) codes
- Action resulting from the mainframe code
- ASCII equivalents for conversion programs that use the IND\$FILE standard EBCDIC to ASCII Language Translation Table
- Resulting action when CC\_CNVT.EXE converted the file

| Mainframe<br>EBCDIC Code              | Action       | ASCII<br>Equivalent | PC Action                                                 |
|---------------------------------------|--------------|---------------------|-----------------------------------------------------------|
| Space & Write (ASA Carriage Controls) |              |                     |                                                           |
| F1h                                   | New page     | 31h                 | Insert LF/LF/LF at start of data line, remove trailing LF |
| 4Eh                                   | Skip 0       | 2Bh                 | Remove trailing LF                                        |
| 40h 80h                               | Skip 1 line  | 20h                 | Insert LF at start of data line, remove trailing LF       |
| F0h                                   | Skip 2 lines | 30h                 | Insert LF/LF at start of data line, remove trailing LF    |
| 60h                                   | Skip 3 lines | 2Dh                 | Insert CR at start of data line, remove trailing LF       |
| Write & Space (Machine)               |              |                     |                                                           |
| 89h                                   | New page     | 69h                 | Remove trailing LF, insert FF after CR                    |
| 01h                                   | Skip 0       | 01h                 | Remove trailing LF                                        |
| 09h                                   | Skip 1 line  | 8Dh                 | No action                                                 |
| 11h                                   | Skip 2 lines | 11h                 | Insert CR/LF at end of data line                          |
| 19h                                   | Skip 3 lines | 19h                 | Insert CR/LF/CR/LF at end of data line                    |
| Space Immediate (Machine)             |              |                     |                                                           |

|                                                                                                                                                                      |              |     |                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----|--------------------------------------------------------------|
| 8BH                                                                                                                                                                  | New Page     | C5h | Replace entire line, including CR/LF, with CR/FF             |
| 0Bh                                                                                                                                                                  | Skip 1 line  | 0Bh | Replace entire line, including CR/LF, with CR/LF             |
| 13h                                                                                                                                                                  | Skip 2 lines | 13h | Replace entire line, including CR/LF, with CR/LF/CR/LF       |
| 1Bh                                                                                                                                                                  | Skip 3 lines | 8Fh | Replace entire line, including CR/LF, with CR/LF/CR/LF/CR/LF |
| LF is the line-feed character ASCII 0Ah (decimal 10)<br>FF is the form-feed character ASCII 0Ch (decimal 12)<br>CR is the carriage return character 0Dh (decimal 13) |              |     |                                                              |

## Chapter C5. Opening Documents from a 3270 Terminal Emulator Session

---

DocumentDirect allows users of 3270 emulation programs to press a predefined key sequence to open reports in DocumentDirect based on data on their screens. For example, suppose a user is viewing a list of overdrawn checks. The user can highlight a particular check and account number and press a key sequence, such as CTRL+D, to open DocumentDirect to the bank statement containing that check.

Note that the 3270 terminal emulator must be running under HLLAPI and must allow the user to invoke an external executable by pressing a specified key sequence.

The external executable invoked by the user is the DocumentDirect-supplied HLLAPIVIEWER.EXE program. This program extracts data from the user's screen based on definitions you provide in an INI file, referred to as the image presentation profile. This extracted data is used to replace variables in a script template file to produce a script file. The RDSWIN.EXE program is then automatically invoked with the script file as a parameter. RDSWIN.EXE uses the information in the script file to open the desired document within DocumentDirect.

To implement the above feature, you must do the following:

1. Create an image presentation profile (an INI file). This file provides instructions to HLLAPIVIEWER.EXE for extracting data from the screen and using that data to construct report indexes, such as a Report ID, Section ID, or topic items.
2. Create a script template file that is used to generate a script file using extracted data. The HLLAPIVIEWER.EXE program replaces the variables in the template file, and the resultant script file is passed to DocumentDirect. DocumentDirect runs this script file to open the document indicated by the data on the screen.
3. Customize the emulator program so that a key sequence can be executed from within your 3270 terminal emulator. Executing the key sequence should pass the

following executable file and arguments to the command line:

```
HLLAPIVIEWER.EXE sessID path
```

where:

*sessID* is the short session ID used by the 3270 terminal emulator. The default value for *sessID* is A. This default is used only if both arguments, *sessID* and *path*, are omitted from the command line.

*path* is the full path and filename of the image presentation profile used to extract data from the emulator screen. The default value for *path* is HLLAPIVIEWER.INI. This default is used only if the *path* argument is omitted from the command line.

Refer to your terminal emulator's documentation to determine whether the terminal emulator runs under HLLAPI and is customizable. The documentation for your emulator should describe how to customize the emulator so that pressing a designated key sequence executes a command, as described above. The following sections describe how to create the image presentation profile and the script template file.

## Creating an Image Presentation Profile

The image presentation profile is an INI file that provides instructions to the HLLAPIVIEWER.EXE that do the following:

- Extract data from the screen.
- Use that data to construct document indexing information such as topic items and Section IDs.
- Locate the appropriate script template file to use.

The entries in the image presentation profile are grouped into sections. Each section begins with the section name enclosed in square brackets, such as [Application Section]. Within each section the entries are specified in the format *key=value*. Comment lines begin with a semicolon (;) in the first position. Blank lines are allowed and are ignored. A sample annotated profile is shown below.

```
[Application Section]
ScreenIdentifier=<ScreenNumber>
HLLAPIDll="C:\EHHLAPI\ACELHAPI.DLL"
HLLAPIProcedure="HLLAPI"
CommandLine="/PROFILE C:\MOBIUS\RDSWIN.INI"
```

```
[VDR_OLSI-01]
ServerId=<"VDR61TQV">
TopicId=<"ACCTS">
TopicItem=<SequenceNumber+"-"+Cycle>
TopicVersion=<Date>
ReportId=<"ACCTRPT">
;Script template path/filename- change this to reflect
;the actual path/filename
ScriptTemplate=C:\PROGRAM FILES\MOBIUS\DDR\VIEW.STP
```

```
[Item_Date]
```

```
;Starting row position of the data item on the screen
ItemPositionRow=1
;Starting column position of the data item on the screen
ItemPositionColumn=70
;Length of data item
ItemLength=10
;Hexadecimal code to reformat date in appropriate format for
```

```
;version number
ReformatPattern=67890134BCEF
```

```
[Item_SequenceNumber]
ItemPositionRow=Cursor
ItemPositionColumn=66
ItemLength=13
```

```
[Item_Cycle]
ItemPositionRow=3
ItemPositionColumn=45
ItemLength=1
```

```
[Item_ScreenNumber]
ItemPositionRow=1
ItemPositionColumn=1
ItemLength=7
```

### [Application Section]

The [Application Section] section contains keys that control overall operation of the image presentation profile. These keys are as follows:

| Key              | Valid Values          | Description                                                                                                                                                             |
|------------------|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ScreenIdentifier | <i>literal string</i> | Screen identifier extracted by HLLAPI viewer.                                                                                                                           |
| HLLAPIDll        | <i>path\filename</i>  | Path and filename of the DLL file used by HLLAPIVIEWER.EXE to extract data from the 3270 emulator screen.                                                               |
| HLLAPIProcedure  | <i>literal string</i> | Specific function that should be called in the HLLAPIDll. Typically, the value for this key is "HLLAPI."                                                                |
| CommandLine      | <i>literal string</i> | Additional data that is passed to DocumentDirect as a parameter of the RDSWIN.EXE command. For example, this key allows you to use a custom INI file in DocumentDirect. |

**[VDR\_ *name*]**

The [VDR\_ *name*] section contains a group of formatted strings. In some of these strings, the data obtained from the 3270 emulator session is used to create compound strings that serve as the new document indexes. Examples of such indexes are topic items and Section IDs. The example image presentation profile above contains the following index examples:

| Key            | Valid Values         | Description                                                                                                                                                                |
|----------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ServerId       | <i>format string</i> | Data items extracted and used as parameters in ScriptTemplate file. See "Format Strings" for details.                                                                      |
| TopicId        | <i>format string</i> | Topic to be used to search an item. See "Format Strings" for details.                                                                                                      |
| TopicItem      | <i>format string</i> | Index to a report. Built as a concatenation of data items extracted from the screen. See "Format Strings" for details.                                                     |
| TopicVersion   | <i>format string</i> | Version number based on the current date. See "Format Strings" for details.                                                                                                |
| ReportId       | <i>format string</i> | Report that will be displayed when script file executes. See "Format Strings" for details.                                                                                 |
| ScriptTemplate | <i>path\filename</i> | Path and filename of the script template used to build the script file. Variables are replaced in this template file to create the script file executed by DocumentDirect. |

**[Item\_name]**

Each [Item\_name] section locates data to be extracted from the terminal emulator screen and optionally reformats that data. Keys that may be found in this section include the following:

| Key                | Valid Values                                 | Description                                                                                                                                                                                                                                                |
|--------------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ItemPositionRow    | $n \geq 1$ , "Cursor"                        | Starting row position of the data item: <ul style="list-style-type: none"> <li>• <math>n</math>—starting row is row number <math>n</math>.</li> <li>• "Cursor"—starting row is the row on which the cursor is currently located.</li> </ul>                |
| ItemPositionColumn | $n \geq 1$ , "Cursor"                        | Starting column position of the data item: <ul style="list-style-type: none"> <li>• <math>n</math>—starting column is column number <math>n</math>.</li> <li>• "Cursor"—starting column is the column in which the cursor is currently located.</li> </ul> |
| ItemLength         | $n \geq 1$                                   | Length of data item.                                                                                                                                                                                                                                       |
| ReformatPattern    | See "Valid Values of ReformatPattern" below. | Hexadecimal code that indicates the type of data reformatting that should be done on an item. This type of reformatting can be used to add or remove punctuation from any data type or to reformat a date to create a version number.                      |

*Valid Values of ReformatPattern*

ReformatPattern reformats data from the 3270 terminal emulator screen in either or both of



the following ways:

- Rearranges the characters when formatting a data item. The numbers 0 to 9 are used to represent positions 1 to 10 in the original data item; the letters A to Z represent positions 11 to 36.
- Adds formatting characters when formatting a data item. Any character other than a number or a letter can be used.

**Note:** ReformatPattern is required even if you want to display a data item without changing its format. See example 1 below.

Examples:

1. To display a 12-character data item "as is" (in other words, without any reformatting), set ReformatPattern as shown below:

```
ReformatPattern=0123456789AB
```

2. To reformat the date and time 01/08/1999 14:39 in the format 199901081439, first specify the year (located in positions 7–10, so use digits 6 through 9 to represent these positions), then the month (located in positions 1 and 2, so use digits 0 and 1 to represent these positions), then the day (located in positions 4 and 5, so use digits 3 and 4 to represent these positions), then the hour (located in positions 12 and 13, so use B and C to represent these positions), then the minutes (located in positions 15 and 16, so use E and F to represent these positions). Set ReformatPattern as shown below:

```
ReformatPattern=67890134BCEF
```

You could use this reformatted data item to create a version from a report's date, for instance.

3. To reformat the date and time 01/08/1999 14:39 in the format 1999-01-08-14:39, set ReformatPattern as shown below:

```
ReformatPattern=6789-01-34-BC:EF
```

4. To add a decimal point to a numeric data item, use the character representing the decimal point—for example, a period or a comma. You can also specify the number of decimal places this way. For example, to specify 3 decimal places, set ReformatPattern as shown below:

```
ReformatPattern=0123456.789
```

## Creating a Script Template File

A script template file is a template that contains one or more of the variables described below. The template is used to create a DocumentDirect script file with actual values replacing the variables.

| Variable | Description |
|----------|-------------|
|----------|-------------|

| Variable        | Description                                                                                                                                                                                                       |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| %DATE%          | Date HLLAPIVIEWER.EXE is executed. Format is as specified in the Windows Control Panel.                                                                                                                           |
| %REPORTID%      | Report ID of the document to be opened in DocumentDirect. Extracted from the ReportId key in the [VDR_name] section of the image presentation profile.                                                            |
| %REPORTSECTION% | Report section of the document to be opened in DocumentDirect. Extracted from the ReportSection key in the [VDR_name] section of the image presentation profile.                                                  |
| %REPORTVERSION% | Report version of the document to be opened in DocumentDirect. Extracted from the ReportVersion key in the [VDR_name] section of the image presentation profile.                                                  |
| %SERVERID%      | ID of the document server that contains the topic or report index of the document to be opened in DocumentDirect. Extracted from the ServerId key in the [Screen_name] section of the image presentation profile. |
| %TIME%          | Time HLLAPIVIEWER.EXE is executed. Format is as specified in the Windows Control Panel.                                                                                                                           |
| %TOPICID%       | Topic ID of the document to be opened in DocumentDirect. Extracted from the TopicId key in the [Screen_name] section of the image presentation profile.                                                           |
| %TOPICITEM%     | Topic item of the document to be opened in DocumentDirect. Extracted from the TopicItem key in the [VDR_name] section of the image presentation profile.                                                          |

| Variable       | Description                                                                                                                                                    |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| %TOPICVERSION% | Topic version of the document to be opened in DocumentDirect. Extracted from the TopicVersion key in the [VDR_name] section of the image presentation profile. |

A sample script template file is shown below. Note that all variables must be enclosed in double-quotes. For more information on writing script files, refer to Chapter 5.

```
OPENTOPIC SERVERID "%SERVERID%" TOPICNAME "%TOPICID%" TOPICVERSIONID
"%TOPICVERSION%" TOPICITEM "%TOPICITEM%" REPORTID "%REPORTID%" VERSIONID
"%REPORTVERSION%" SECTIONID "%REPORTSECTION%"
```

The HLLAPIVIEWER.EXE program replaces the variables in the script template with values extracted from the terminal emulator screen. This new data is written to a DocumentDirect script file. The HLLAPIVIEWER.EXE program executes RDSWIN.EXE from the command line, sending the script file and any additional information contained in the image presentation profile's CommandLine key as parameters. RDSWIN.EXE launches DocumentDirect and uses the information in the script file to locate and open the desired document.

## Format Strings

Use format strings in various sections of the DocumentDirect image presentation profile to specify such information as the format of Server IDs, Report IDs, Section IDs, topic items, Topic IDs, and Version IDs. A format string is specified as a series of *tokens* concatenated with plus signs. The entire format string is enclosed in angle brackets (< >) and can have up to 10 tokens as shown below:

```
<token1+token2+...+token10>
```

where each token is one of the following:

- "literal string" – e.g., "Check Number"
- Data item name – defined in the image presentation profile. Note that data item names are not case-sensitive.

### Examples

1. SequenceNumber is a 13-digit data item and Cycle is a 1-digit data item. The TopicItem is defined as:

```
TopicItem=<SequenceNumber+"-"+Cycle>
```

The format string specifies that the topic items are in the form sssssssssssss-c, where sssssssssssss is a 13-digit sequence number, and c is a 1-digit cycle number.

2. BankNumber is a 3-digit data item and TopicID is defined as:

|                            |
|----------------------------|
| TopicID=<BankNumber+"CHK"> |
|----------------------------|

The format string specifies that the Topic IDs are in the form *nnn*CHK where *nnn* is a 3-digit bank number.

## Chapter C6. Creating Custom Configurations

---

The default DocumentDirect toolbar and menu bar can be customized to meet the needs of your users and your enterprise. Administrators can create multiple DocumentDirect configurations in order to provide different sets of users with access to different DocumentDirect functions.

A custom DocumentDirect configuration can have the following characteristics:

- Configurations can include toolbars, menus, and submenus that are not part of the default DocumentDirect installation, and can include commands that run Windows programs and DocumentDirect scripts.
- Specific DocumentDirect functions can be unavailable to users. For example, this includes the ability to restrict access to **Password Maintenance** and **Customize Interface** functions.
- Configurations can be language-specific.

If not specifically restricted by an administrator, users can use all existing DocumentDirect functions and can customize their default toolbar and menu bar by adding commands and buttons, and by creating new toolbars, menus, and submenus.

When users make configuration changes, these changes apply only to their own workstation and affect only their own Windows Registry file. The additional configuration functions available to administrators allow administrators to create separate DocumentDirect custom configurations, each of which is saved in its own Registry (.REG) file. A .REG file is a Registry script that is applied to a workstation by the Windows Registry Editor program. Each .REG file can be distributed and applied to the registries of one or more workstations. Individual configurations, each in its own .REG file, can be created this way, providing the administrator with the flexibility to create and adapt toolbars and menu bars to specific types of users and in different languages. At any point in time, a single configuration is active on each workstation.

Information in this chapter is intended to help administrators use DocumentDirect's administrative functions to create custom configurations. This chapter supplements the material in the "Customizing Toolbars and Menus" section in Chapter C1, and should be used in conjunction with it.

### *Instructions for Creating Custom Configurations*

---

Administrators are DocumentDirect users with access to the DDRADMIN.DLL file. Administrators have access to the DocumentDirect **Options|Customize Interface** functions, as well as to a number of additional configuration-related functions that are found on the

Customize dialog's **File** menu: **Load**, **Save**, **Save As**, **Unload**, **Restrict** or **Grant**.

To create a custom configuration for your users, perform the following steps:

1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
2. Decide if you want to create a new Registry (.REG) file for this configuration or if you want to change an existing .REG file.
  - a) To create a new .REG file, go to step 4.
  - b) To change an existing .REG file, go on to step 3.
3. In the Customize dialog, select **File|Load**. Use the Load dialog to navigate to and open the appropriate .REG file. The name of the .REG file appears in the Customize dialog title bar.
4. Make all necessary changes to the configuration, and use the **Preview** button to see and use your changes. See "Customizing Toolbars and Menus" for detailed instructions on making changes.
5. Select either **File|Save** or **File|Save As** to save the configuration.
6. To unload the new or revised configuration and restore your own configuration, select **File|Unload** and then click **Cancel**.
7. Distribute the .REG file to your users.

## Restricting User Access to Specific Functions

Administrators have the ability to restrict which DocumentDirect functions, or commands, are available to users. If desired, administrators can restrict user access to and use of specific DocumentDirect functions while still allowing users to customize other functions within their DocumentDirect work environment. Or, administrators can prevent all customizations of DocumentDirect.

Restricted commands are not shown in menus or toolbars when viewed by a user, and so are not available for use. When viewed by an administrator, restricted commands are shown in bold in the Customize dialog and permit the administrator to grant user access when necessary.

If a user attempts to run a restricted command from a DocumentDirect script, the command is not executed and an error is generated.

To create a custom configuration that includes restricting access to specific DocumentDirect functions, perform the following steps:

1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
2. Decide if you want to create a new Registry (.REG) file for this configuration or if you want to change an existing .REG file.

- a) To create a new .REG file, go to step 4.
- b) To change an existing .REG file, go on to step 3.
3. In the Customize dialog, select **File|Load**. Use the Load dialog to navigate to and open the appropriate .REG file. The name of the .REG file appears in the Customize dialog title bar.
4. Expand commands in either the Custom Configuration or Available Commands pane so the command to be restricted is visible.
5. Select the command in either pane.
6. In the Customize dialog, select **File|Restrict**. The restricted command is displayed in boldface type.
7. Make all other necessary changes to the configuration, and use the **Preview** button to see and use your changes. See "Customizing Toolbars and Menus" for detailed instructions on making changes.
8. Select either **File|Save** or **File|Save As** to save the configuration.
9. To unload the new or revised configuration and restore your own configuration, select **File|Unload** and then click **Cancel**.
10. Distribute the .REG file to your users.

## Granting User Access to Restricted Functions

Administrators have the ability to grant user access to previously restricted DocumentDirect commands. When a command is no longer restricted, it appears in menus or toolbars when viewed by the user, and is available for use. When a command is no longer restricted, it is displayed in the default typeface.

To create a custom configuration that includes access to previously restricted DocumentDirect functions, perform the following steps:

1. If the Customize dialog is not already open, on the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
2. Decide if you want to create a new Registry (.REG) file for this configuration or if you want to change an existing .REG file.
  - a) To create a new .REG file, go to step 4.
  - b) To change an existing .REG file, go on to step 3.
3. In the Customize dialog, select **File|Load**. Use the Load dialog to navigate to and open the appropriate .REG file. The name of the .REG file appears in the Customize dialog title bar.
4. Expand commands in either the Custom Configuration or Available Commands pane so the restricted command is visible.

5. Select the command in either pane.
6. In the Customize dialog, select **File|Grant**. The command is displayed in the default typeface.
7. Make all other necessary changes to the configuration, and use the **Preview** button. See "Customizing Toolbars and Menus" for detailed instructions on making changes.
8. Select either **File|Save** or **File|Save As** to save the configuration.
9. To unload the new or revised configuration and restore your own configuration, select **File|Unload** and then click **Cancel**.
10. Distribute the .REG file to your users.

## Creating Language-Specific Configurations

Administrators have the ability to create language-specific custom configurations of the DocumentDirect toolbar and menu bar and to distribute those configurations to users.

To create a language-specific custom configuration, perform the following steps:

1. Before starting DocumentDirect, change the Windows Regional Settings on your workstation by displaying your Windows control panel and selecting **Regional Settings**.
2. Select the language and click **Apply**. When prompted to restart your computer, click **No**.
3. Click **OK**.
4. Start DocumentDirect. The language displayed is the language you selected on the Windows control panel.
5. On the DocumentDirect menu bar, select **Options|Customize Interface**. The Customize dialog appears.
6. Decide if you want to create a new Registry (.REG) file for this configuration or if you want to change an existing .REG file.
  - a) To create a new .REG file, go to step 8.
  - b) To change an existing .REG file, go on to step 7.
7. In the Customize dialog, select **File|Load**. Use the Load dialog to navigate to and open the appropriate .REG file. The name of the .REG file appears in the Customize dialog title bar.
8. Make all necessary changes to the configuration, and use the **Preview** button. See "Customizing Toolbars and Menus" for detailed instructions on making changes.

**Note:** If a .REG file containing custom commands in one language is applied to a workstation that is set to a different language, the custom commands are displayed in the .REG file's language and all other commands are displayed in the workstation's language.

9. Select either **File|Save** or **File|Save As** to save the configuration.
10. To unload the new or revised configuration and restore your own configuration, select **File|Unload** and then click **Cancel**.
11. Distribute the .REG file to your users.

### ***Customize Dialog File Menu***

---

Administrators have access to a number of configuration-related functions that are found on the Customize dialog's **File** menu: **Load**, **Save**, **Save As**, **Unload**, **Restrict** or **Grant**, as shown in Figure C-1.



*Figure C-1. Administrator's Customize Dialog File Menu*

| Menu Item | Description                                                                                                                     |
|-----------|---------------------------------------------------------------------------------------------------------------------------------|
| Load      | Displays the Load dialog that allows you to navigate to and open a Windows Registry (.REG) file in order to make changes to it. |
| Save      | Displays the Save dialog that allows you to save the changes you have made to the loaded .REG file.                             |
| Save As   | Displays the Save As dialog that allows you to save the changes that you have made to a .REG file with a different name.        |
| Unload    | Unloads the loaded .REG file and restores your workstation's DocumentDirect configuration.                                      |



| Menu Item | Description                                                                                                                                                                                                                                                                       |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Restrict  | Disables the selected command throughout DocumentDirect. Restricted commands cannot be accessed by users, do not appear in menus or on toolbars, and cannot be run from scripts. Restricted commands are visible to administrators and are shown in bold in the Customize dialog. |
| Grant     | Enables the selected command throughout DocumentDirect. Enabled commands can be accessed to users, appear in menus and on toolbars, and can be run from scripts.                                                                                                                  |
| Cancel    | Closes the Customize dialog without saving changes.                                                                                                                                                                                                                               |

## Chapter C7. Configuring Systems for Web-based Distribution

---

Both DocumentDirect and DocumentDirect Application Suite can be distributed over the Internet and run as plug-in applications from a Web browser. To accomplish this, an administrator must first configure the installation and create a hyperlink to it. Administrators can set up the installation in a number of ways, such as using software available from other vendors, setting it up manually, or creating a Zip utility with a self-extracting executable file.

This chapter describes a recommended method for providing a download using a third-party software product called InstallFromTheWeb (IFW). InstallFromTheWeb allows administrators to provide automatic download and installation of the complete DocumentDirect or DocumentDirect Application Suite product, or selected components.

To configure your system for Web-based distribution, you must do the following:

1. Create an installation directory on your Web server that contains the installation files. To create the installation directory, copy the files from your DocumentDirect or DocumentDirect Application Suite installation media to a directory on the Web server.
  - ◆ To include a customized RDSWIN.INI to pre-configure either product for your users, replace the RDSWIN.INI file in the Disk1 directory (the same directory where the SETUP.EXE program is located) with your customized version. Refer to Chapter C9 for more information about customizing an RDSWIN.INI file.
  - ◆ To provide a customized DDRAPP.INI file to pre-configure DocumentDirect Application Suite, replace the default DDRAPP.INI file in the Disk1 directory

with your customized version. Refer to Chapter C9 for more information about customizing a DDRAPP.INI processing profile. Create a subdirectory named "Custom" in the Disk1 directory. Include in this subdirectory all files referenced in the DDRAPP.INI file, such as script templates and external index files. InstallFromTheWeb will install all files in the Disk1\Custom directory.

2. Run the InstallFromTheWeb wizard to configure the installation. You must run the InstallFromTheWeb wizard on the machine that hosts the installation directory.

The wizard is used to customize a series of installation run-time dialogs and the information available on the installation Web page. All details entered in the wizard are stored in an IFW project file. This project file must reside on the Web server; additionally, the installation files must be accessible to the Web server. They should either be located on the Web server itself, on a networked drive accessible to the Web server, or on an FTP site accessible to the Web server.

3. Incorporate the installation Web page generated by InstallFromTheWeb into a custom Web page on your server. The InstallFromTheWeb wizard produces a generic installation Web page from a basic HTML template. You can create a custom Web page by doing either of the following:
  - Create a custom template to match your site's page style. Specify the custom template's location in the InstallFromTheWeb wizard so that InstallFromTheWeb's output HTML code is automatically formatted in your custom page style.
  - Incorporate the generic HTML code produced by InstallFromTheWeb into another Web page on your site. Users will access this page to install DocumentDirect. Edit the generic HTML output as necessary to make it match your site's custom Web page style.

The following sections describe how to use the InstallFromTheWeb wizard to configure a Web-based installation and how to use the output from that wizard to create a custom Web page containing a link users can access to install DocumentDirect or DocumentDirect Application Suite from a Web browser. While the illustrations and examples refer to DocumentDirect, you can use the instructions to create Web-based installations for DocumentDirect Application Suite as well.

## ***Configuring the Installation with InstallFromTheWeb***

---

InstallFromTheWeb, a third-party product available from InstallShield Software Corporation ([www.installshield.com](http://www.installshield.com)), enables you to configure a DocumentDirect installation for users who want to install or run DocumentDirect over the Web. You must have the InstallFromTheWeb software installed on your machine before you can run its wizard.

## **Starting a Project**

To launch the InstallFromTheWeb wizard and start an installation project, select **Start|Programs|InstallShield InstallFromTheWeb|Design-time Wizard** from the Windows taskbar. The dialog shown in Figure C-2 appears.

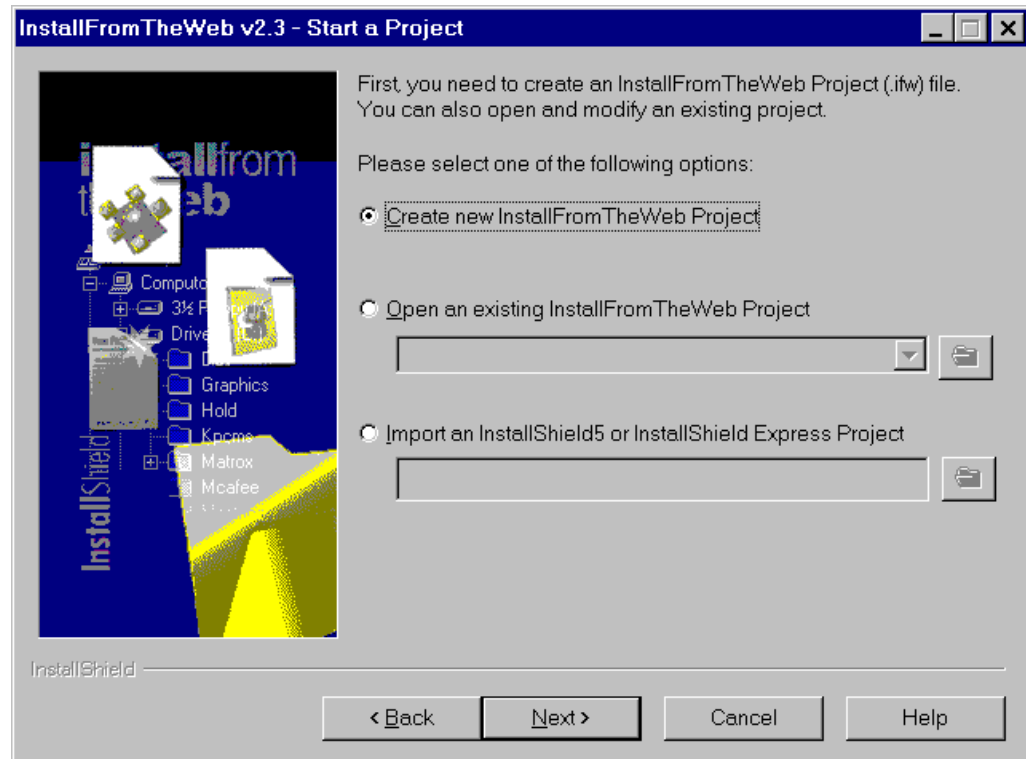


Figure C-2. Start a Project

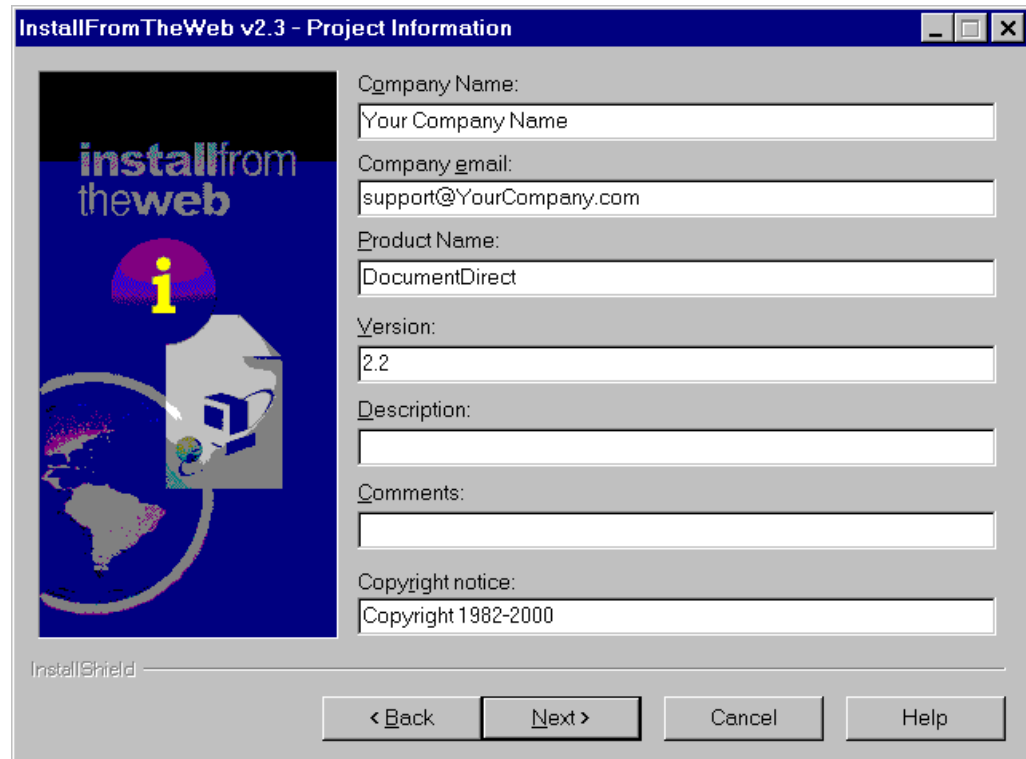
Select "Create new InstallFromTheWeb Project" if you are running this wizard for the first time. If you wish to re-run a previous session of InstallFromTheWeb (for example, to update your installation for a new version of DocumentDirect), select "Open an existing InstallFromTheWeb Project" and then choose the appropriate .IFW file from the drop-down list.

Click **Next>**.

## Specifying Project Information

To specify information about your installation project, perform the following steps:

1. Enter all relevant information about your company and the product you are installing (DocumentDirect) in the appropriate fields on the Project Information panel. This information will appear on the installation Web page for DocumentDirect. An example of a completed panel is shown in Figure C-3.



InstallFromTheWeb v2.3 - Project Information

installfrom theweb

Company Name:  
Your Company Name

Company email:  
support@YourCompany.com

Product Name:  
DocumentDirect

Version:  
2.2

Description:

Comments:

Copyright notice:  
Copyright 1982-2000

InstallShield

< Back   Next >   Cancel   Help

Figure C-3. Specify Project Information

2. Click **Next>**.
3. Because the DocumentDirect installation already includes a Welcome panel, you can select "No Welcome panel" on the panel shown in Figure C-4.

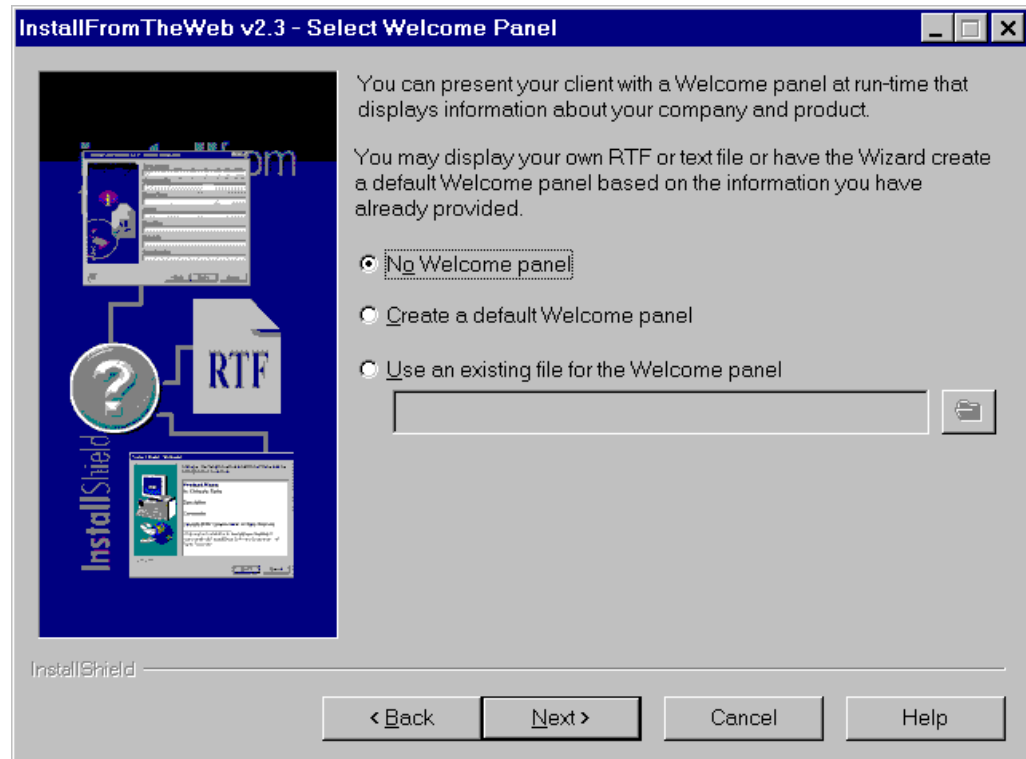


Figure C-4. Select Welcome Panel

4. Click **Next>**.

## Selecting Installation Options

To begin selecting the installation options, perform the following steps:

1. Enter the path to the installation directory in the Folder: field on the Source Files Folder panel, shown in Figure C-5. This is the installation directory you created on your Web server earlier in order to copy the files from the DocumentDirect installation CD or diskette.

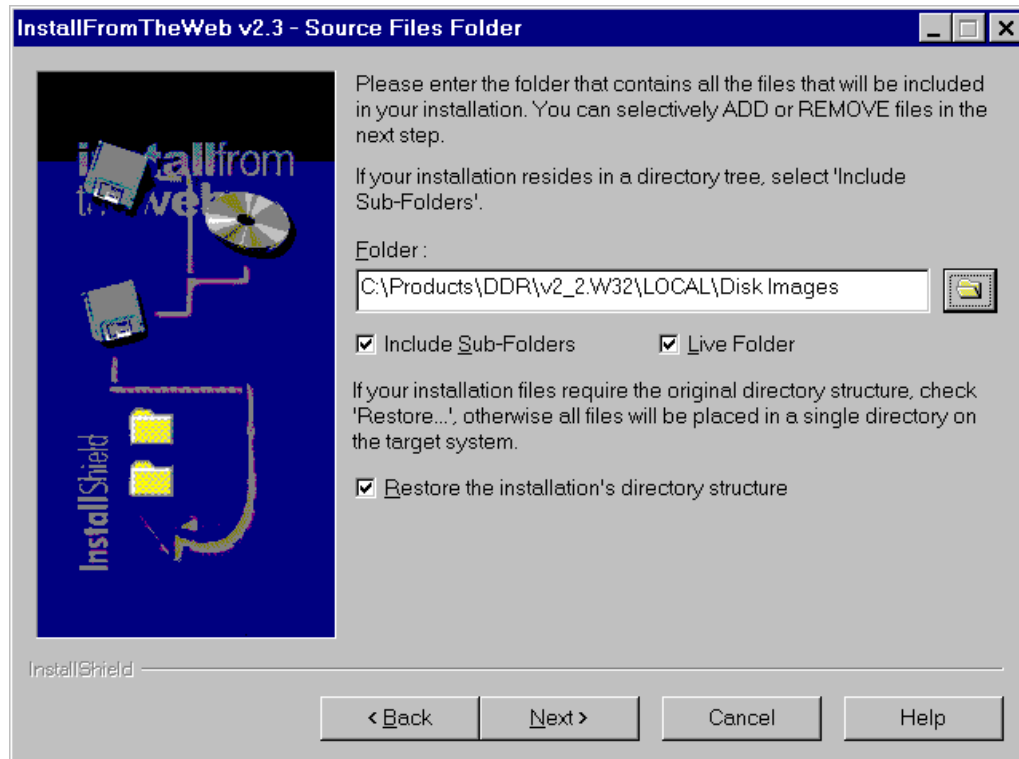


Figure C-5. Select Source Files Folder

2. Refer to the table below to determine the behavior of each checkbox on the Source Files Folder panel shown in Figure C-5. All of these boxes should be checked.

| Checkbox                                       | Action If Checked                                                                                                  |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Include Sub-Folders                            | Includes any files in subdirectories of the source file directory specified                                        |
| Live Folder                                    | Includes any new files added to the source file directory since the last time the InstallFromTheWeb wizard was run |
| Restore the installation's directory structure | Duplicates the source file directory structure when the installation is copied onto the user's client machine      |

3. Click **Next>**.
4. The Installation Files panel (not shown) appears, with a list of files found in the installation directory. You do not need to add or remove any files from the set shown. Click **Next>**.
5. Select the appropriate install/save option on the Installation Options panel, shown in Figure C-6. Refer to the table below to determine which option to select.

| Checkbox | Action If Checked |
|----------|-------------------|
|----------|-------------------|

| Checkbox         | Action If Checked                                                                                                               |
|------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Install only     | Installs DocumentDirect on a user's client machine, but does not save the installation files on that machine                    |
| Install and save | Saves the files necessary for an installation to a user's client machine and installs DocumentDirect on that machine            |
| Save only        | Saves the files necessary for an installation to a user's client machine, but does not initiate the DocumentDirect installation |

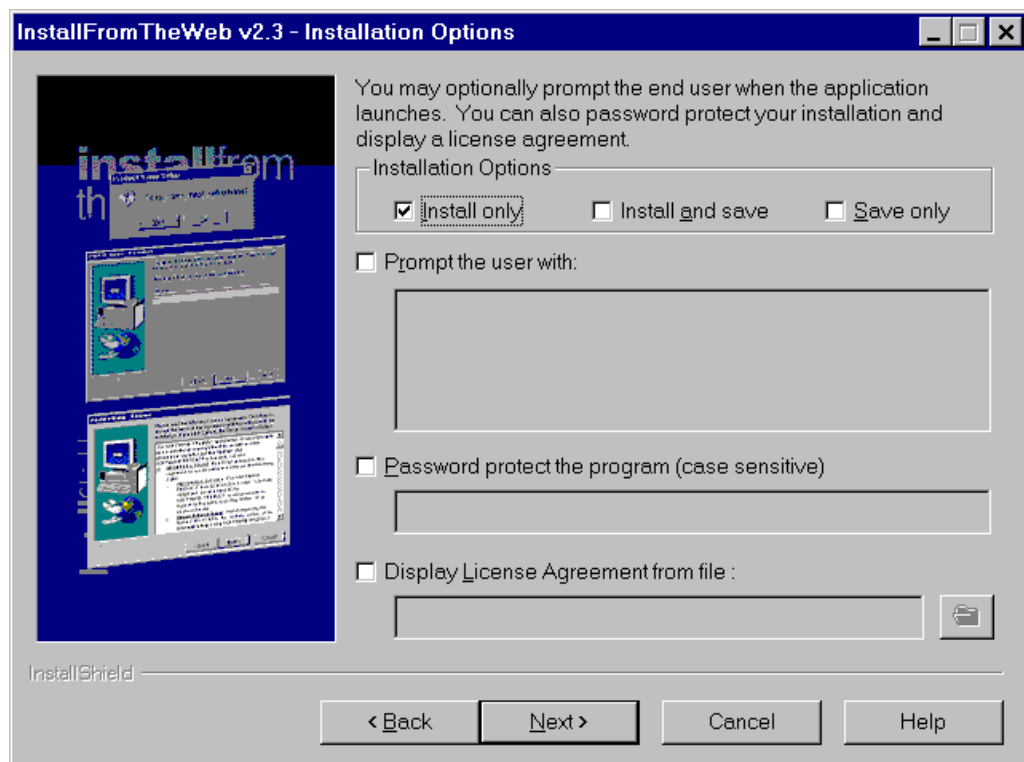


Figure C-6. Select Installation Options

6. Select and configure any other options you wish to specify on the Installation Options panel, shown in Figure C-6. These options are explained on the panel.
7. Click **Next>**.

## Configuring Installation Modes

You can offer multiple installation modes to users installing DocumentDirect over the Web. Installation modes allow you to customize installations to offer users more or less control over certain installation options. For example, you can set up an installation configuration to do any of the following:

- Specify exactly where DocumentDirect installs on a user's system.
- Specify exactly which program and language components users can install.
- Specify the options above, but allow users to override these default settings.
- Allow users to specify the options above, and do not provide them with any default options.

The options you choose to make available to users during their installation are controlled by command line parameters. The available installation command line parameters are discussed in Chapter A3.

To configure the installation options, perform the following steps:

1. If you *do not* wish to offer multiple configuration options to users downloading DocumentDirect, skip to step 4. Otherwise, on the Installation Types panel, click **Edit...** to edit the configuration of an existing installation mode or **Add...** to add a new installation mode. A sample Installation Types panel is shown in Figure C-7.

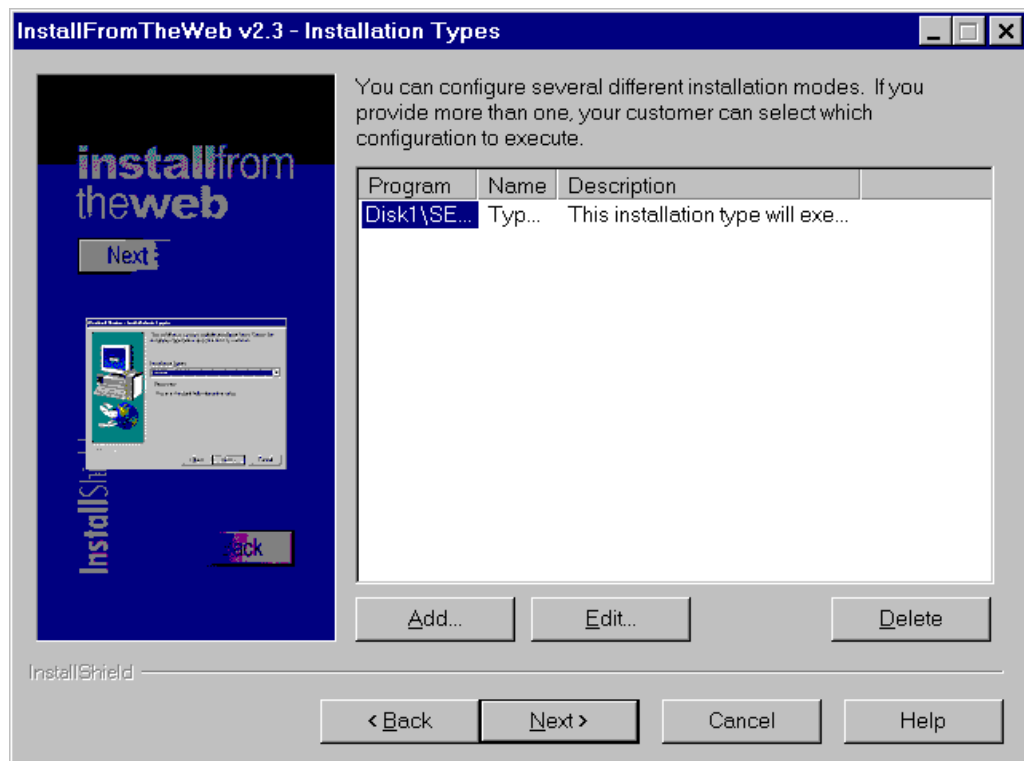
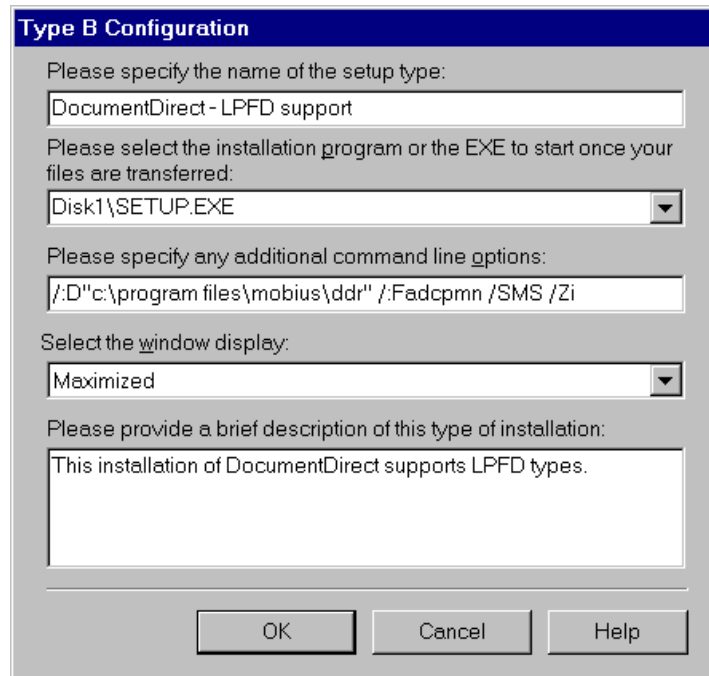


Figure C-7. Select Installation Type

When you select **Add...** or **Edit...** on the Installation Types panel, a dialog similar to the one shown in Figure C-8 appears.





The image shows a Windows-style dialog box titled "Type B Configuration". It contains several input fields and buttons. The first field is labeled "Please specify the name of the setup type:" and contains the text "DocumentDirect - LPFD support". The second field is labeled "Please select the installation program or the EXE to start once your files are transferred:" and is a dropdown menu showing "Disk1\SETUP.EXE". The third field is labeled "Please specify any additional command line options:" and contains the text "/:D\"c:\program files\mobius\ddr\" /:Fadcpmn /SMS /Zi". The fourth field is labeled "Select the window display:" and is a dropdown menu showing "Maximized". The fifth field is labeled "Please provide a brief description of this type of installation:" and contains the text "This installation of DocumentDirect supports LPFD types." At the bottom of the dialog are three buttons: "OK", "Cancel", and "Help".

Figure C-8. Configure Installation Type

2. Provide the following information in the fields on the Configuration dialog, as shown in the sample dialog in Figure C-8:

- A descriptive name for the installation mode you are configuring.
- A relative path to the executable that installs DocumentDirect (SETUP.EXE).
- Any installation command line parameters necessary to customize the installation. Refer to Chapter A3 for a description of these parameters.

Note that the /SMS and /Zi command line parameters may automatically appear in the relevant field. Enter any additional installation parameters before these parameters and do not delete them. Refer to the InstallFromTheWeb Help file for a description of the /SMS and /Zi parameters.

- The preferred window display size—Normal, Minimized, or Maximized.
  - A description of the installation mode you are editing or adding.
3. Click **OK** to save the installation mode and close the Configuration dialog. Any changes to the installation program, mode name, or mode description appear in the list of installation modes in the Installation Types panel.
  4. Click **Next>**.

## Configuring Host Sites

You can make the DocumentDirect installation files available to users from more than one Web site. This may allow users to download files more quickly, as they can choose to download the installation files from a host site that is geographically closer to them.

After the installation project is built initially, the installation files no longer need to reside on the Web server on which the installation project was built. When a user accesses a host site to download DocumentDirect, the Web server at that site can obtain the installation files from a directory on a local or networked drive, or from an FTP site.

To add groups or host sites to the Host Sites panel, shown in Figure C-9, right-click on a group or site in the list. If you wish to edit an existing group or site, right-click on that group or site. Refer to "Adding or Editing a Host Site Group," "Adding or Editing a Host Site," or "Copying a Host Site" for instructions on how to perform each of these functions.

When you finish adding or editing sites, click **Next>**.

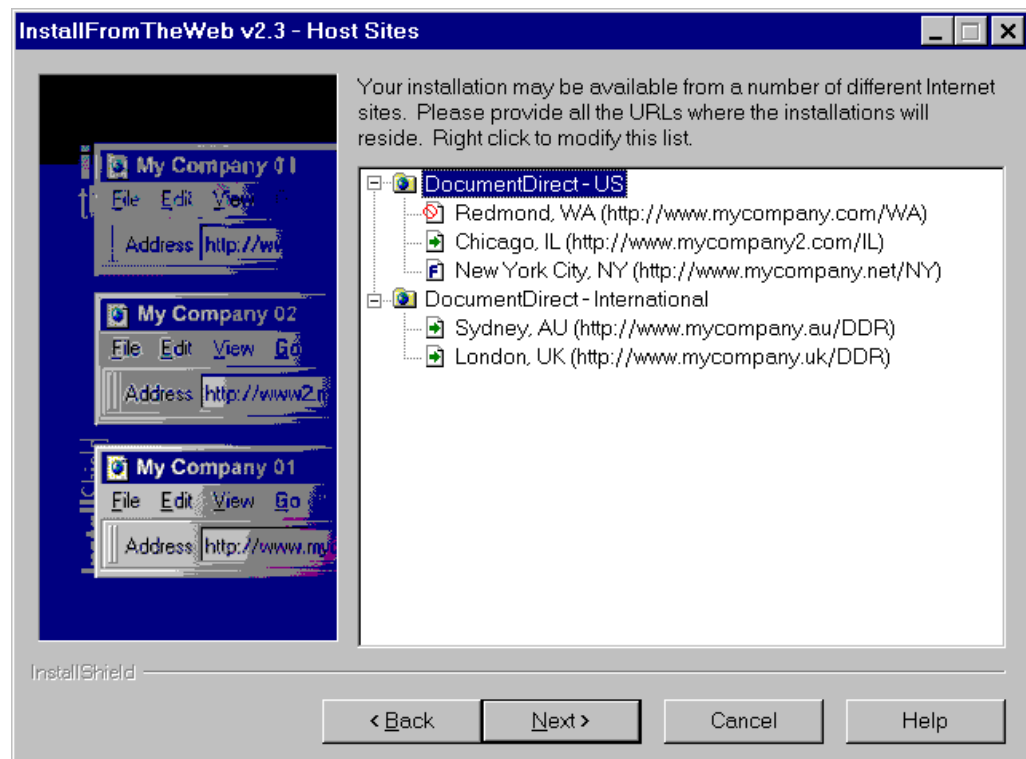


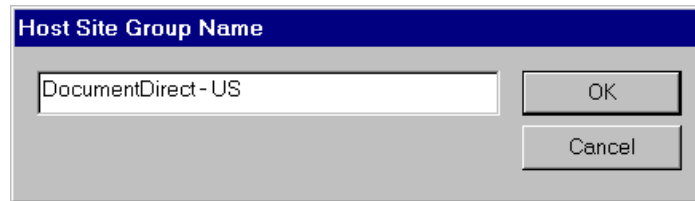
Figure C-9. Display Host Sites

### Adding or Editing a Host Site Group

To add or edit a host site group, perform the following steps:

1. Right-click on an existing host site group in the Host Sites panel to edit an existing host site group, or right-click anywhere in the panel window to add a new host site group.

2. Select **New Group...** or **Edit...** to add a new group or edit an existing group, respectively. The Host Site Group Name dialog, shown in Figure C-10, appears.



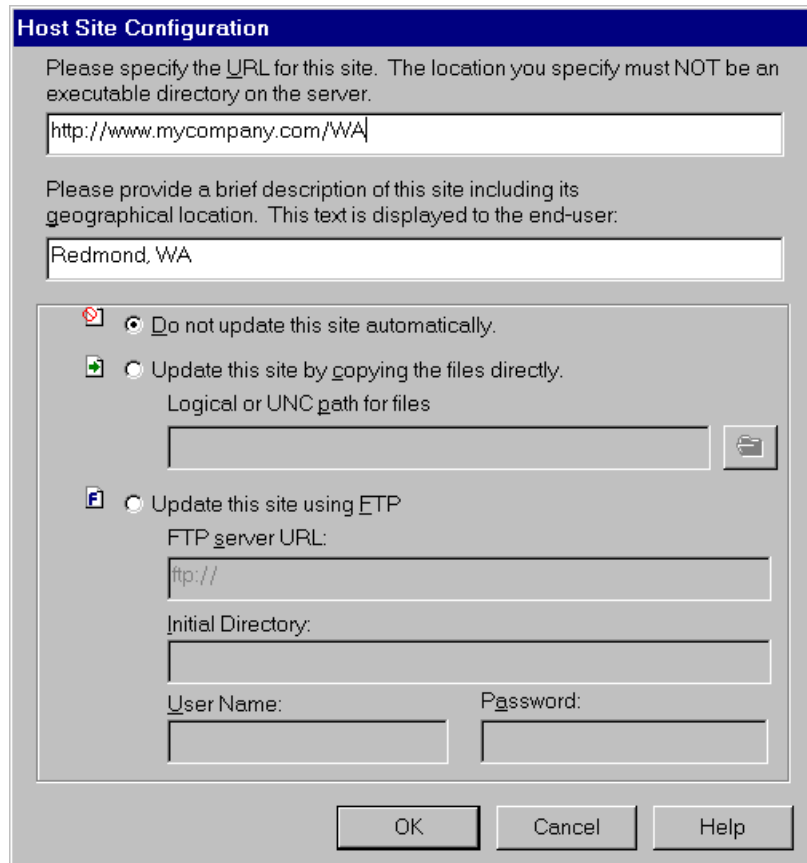
*Figure C-10. Define Host Site Group Name*

3. Enter a descriptive name for the host site group.
4. Click OK to return to the Host Sites panel.

#### *Adding or Editing a Host Site*

To add or edit a host site, perform the following steps:

1. Right-click on an existing host site in the Host Sites panel to edit an existing host site, or right-click anywhere in the panel window to add a new host site.
2. Select **New Site...** or **Edit...** to add a new site or edit an existing site, respectively. The Host Site Configuration dialog, shown in Figure C-11, appears.



**Host Site Configuration**

Please specify the URL for this site. The location you specify must NOT be an executable directory on the server.

Please provide a brief description of this site including its geographical location. This text is displayed to the end-user.

☒ Do not update this site automatically.

☐ Update this site by copying the files directly.

Logical or UNC path for files

☐ Update this site using FTP

FTP server URL:

Initial Directory:

User Name:

Password:

Figure C-11. Configure Host Site Information

- Follow the instructions on the Host Site Configuration dialog to enter the necessary information. Refer to the following table to determine which setting you should select for updating the site you are editing.

| Radio Button                                   | Action                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Do not update this site automatically          | Select this setting if you do not wish to have this host site's installation files updated automatically. If this setting is selected, you must manually copy the installation files to the Web server.                                                                                                   |
| Update this site by copying the files directly | Specify the relative path or full path of the network directory containing the installation files. The host site will access this directory to provide installation files when a user initiates a download.                                                                                               |
| Update this site using FTP                     | Specify the FTP server containing the installation files, and the appropriate directory on that site. The host site will access this FTP site to provide installation files when a user initiates a download. If necessary, provide the login user name and password required for access to the FTP site. |

4. Click **OK** to return to the Host Sites panel.

## *Copying a Host Site*

To copy an existing host site, perform the following steps:

1. Right-click on an existing host site in the Host Sites panel.
2. Select **Copy...** to copy the existing site.
3. Right-click in the window on the Host Sites panel.
4. Select **Paste...** to paste the site you copied.
5. Click **OK** to return to the Host Sites panel.

**Note:** You cannot copy and paste a host site group.

## **Digitally Signing the Installation**

If you wish to digitally sign your installation, follow the instructions on the Digitally Sign Installation panel (not shown) to enter the necessary information. Click **Next>**.

## **Configuring Web-page Generation**

To force your installation project to generate a Web page containing a link to the installation files when you reach the end of the wizard, perform the following steps:

1. Select "Generate a Web page for this installation" on the Web Page Generation panel, shown in Figure C-12. You can use the default template (ifw.htm), or specify a custom template you have created.

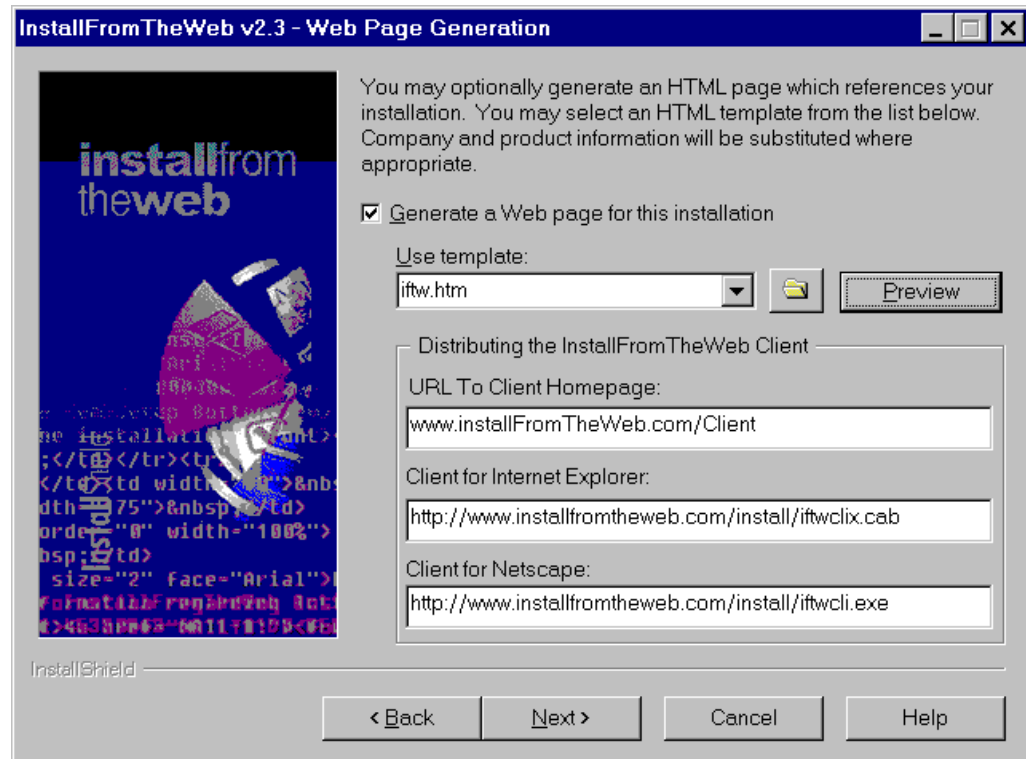


Figure C-12. Configure Web Page Generation

2. Enter the URLs for distribution of the InstallFromTheWeb client. You can accept the default values supplied by the wizard, or enter your own set of URLs if you have downloaded the client to a Web server. Entering a value for the client URLs downloads the InstallFromTheWeb client to the user's machine when a download of DocumentDirect is initiated.
3. Click **Next>**.

## Selecting a Target for the Project File

To create the project file, perform the following steps:

1. In the Target Locations panel, shown in Figure C-13, specify the name under which the wizard should save this installation project. For example, if you enter a project title of "DocumentDirect," when you reach the end of the wizard, the current project will be saved with the name "DocumentDirect.ifw."

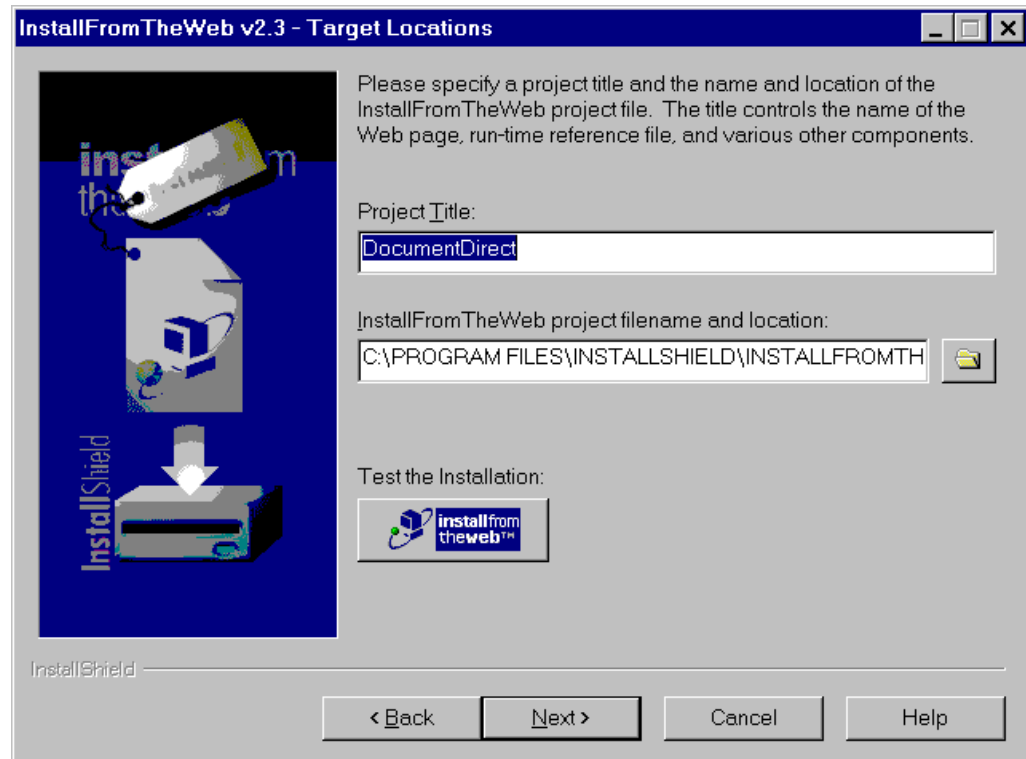


Figure C-13. Define Project Target Location

2. In the appropriate field on the Target Locations panel, specify the directory on the Web server where you want to save the project file. You can accept the default location provided or select your own.
3. If you wish to test the DocumentDirect installation, click **installfromtheweb**. Otherwise, proceed to step 4.
4. Click **Next>**. The Summary panel (not shown) appears. This panel shows a summary of the project information you specified in the wizard and a list of files in the installation directory.
5. Click **Next>**.

## Completing the Installation Project

The Build panel (not shown) appears with the following message: "Your InstallFromTheWeb installation is being created." The path to the runtime reference file is displayed in a window. Click **Finish** to finish building the installation project and exit the wizard.

## Creating a Custom Web Page

When the InstallFromTheWeb wizard is complete, it generates an HTML file that displays the project information and a link to the installation files, as shown in Figure C-14. This file is saved under the product name you specified in the installation directory you specified. For instance, if you listed DocumentDirect as the product name in the InstallFromTheWeb wizard,

the output file is saved as DocumentDirect.htm in the DocumentDirect installation directory.

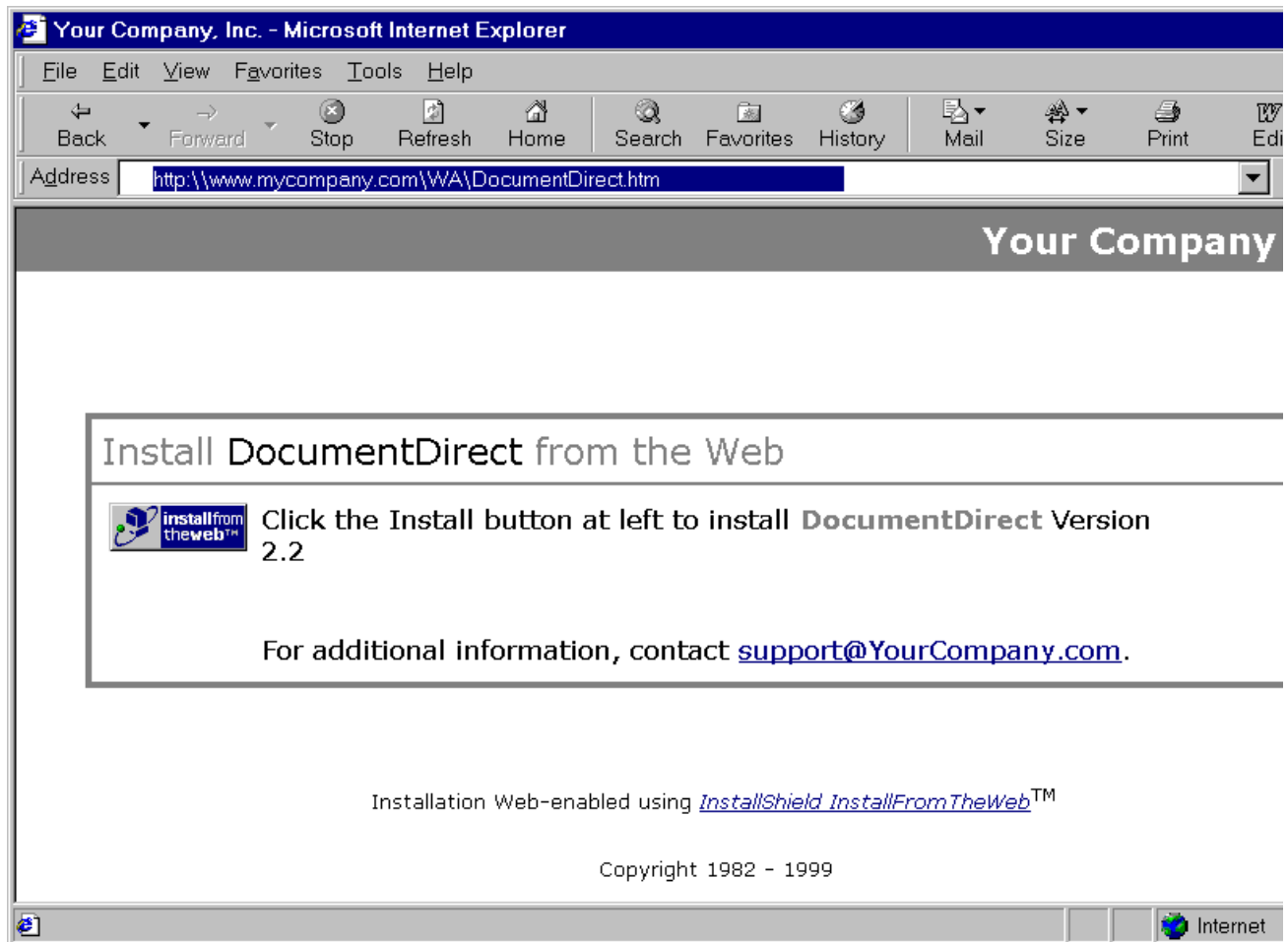


Figure C-14. Download DocumentDirect

**Note:** If the **installfromtheweb** button does not appear on the left side of the page, you may not have the InstallFromTheWeb client installed on your machine. You should download and install the InstallFromTheWeb client from the InstallShield Web site ([www.installshield.com](http://www.installshield.com)).

Administrators can incorporate the HTML code from the automatically generated page into any Web page accessible from the Web server. Users can then access this page and click on the link to initiate download of the installation files, to install DocumentDirect, or both, depending on the settings the administrator selected in the installation project wizard.

## Using DocumentDirect as a Web Browser Plug-in

Once users download and install DocumentDirect over the Internet, they can access links on a Web page to run DocumentDirect as a browser plug-in. Administrators can configure DocumentDirect scripts that launch DocumentDirect, open a specific document within DocumentDirect, print a specific document, or perform any other valid script function.

To set up a Web page link that will run DocumentDirect as a plug-in application,



administrators must perform the following steps:

1. Create a script file to perform a specific function in DocumentDirect, such as opening DocumentDirect, viewing or printing a DocumentDirect document, or annotating a document page. Refer to Chapter 5 for information about writing DocumentDirect scripts. Be sure to save your script with a .MSL file extension. Note that any document servers referenced in the script must also be defined as document servers in the RDSWIN.INI file downloaded by the user.
2. Create a link to the script on the appropriate Web page. The user can click this link on the Web page to run the DocumentDirect script and execute the specified action. Note that the user must already have DocumentDirect installed on the client machine in order to execute the script by clicking the link.

A sample Web page with links to various DocumentDirect scripts is shown in Figure C-15. The links shown on the sample Web page link to DocumentDirect scripts that display a bank statement, print a bank statement, or display a check listing, respectively.

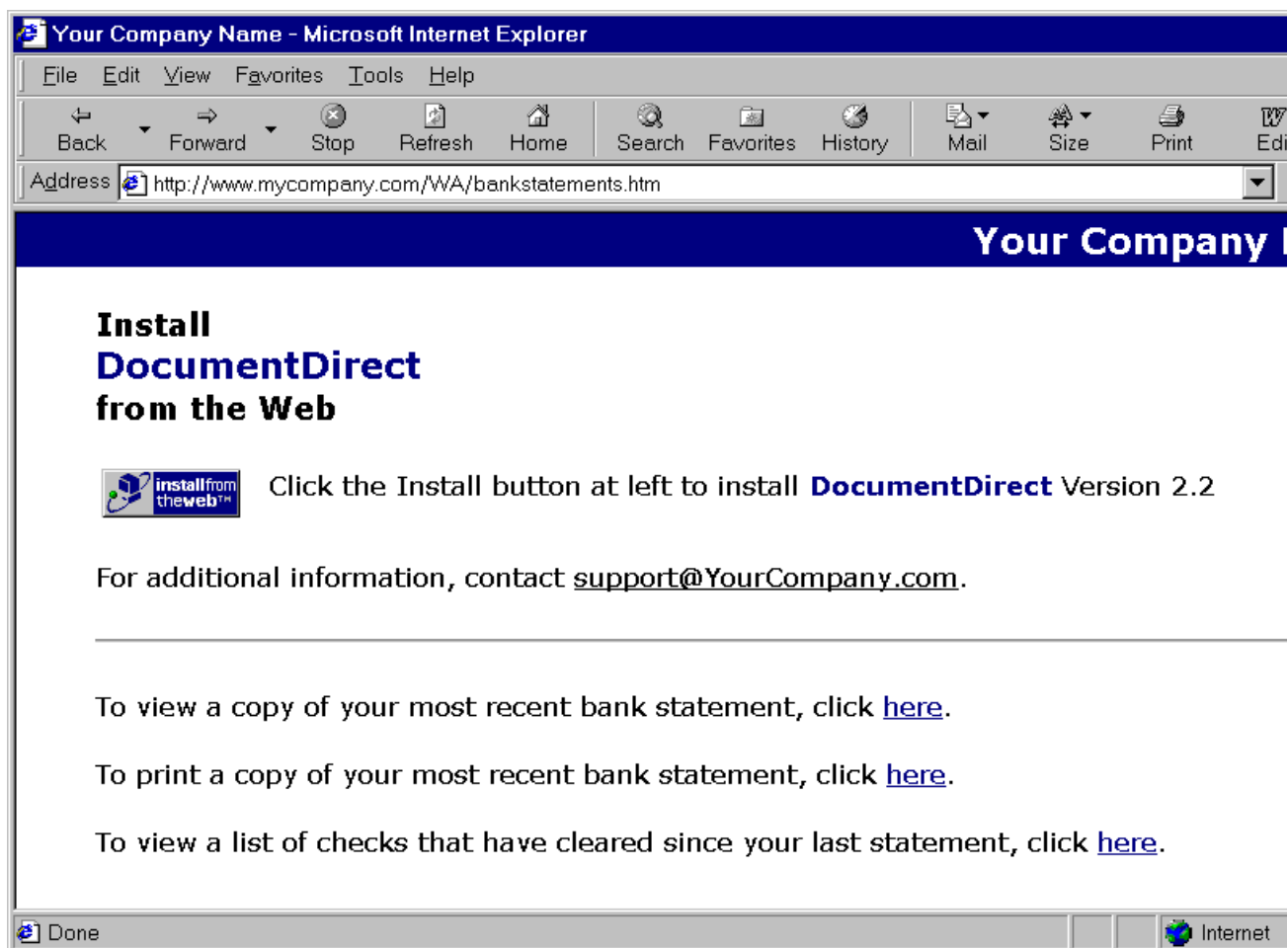


Figure C-15. Run DocumentDirect Scripts from a Web Page

The HTML code for the sample links in Figure C-15 is similar to the following:

```
<P>To view a copy of your most recent bank statement, click
```

```
<A HREF="OPNSTMT.MSL">here</A>.
```

```
<P>To print a copy of your most recent bank statement, click  
<A HREF="PRNTSTMT.MSL">here</A>.
```

```
<P>To view a list of checks that have cleared since your last statement, click  
<A HREF="OPNCKLST.MSL">here</A>.
```

where:

- OPNSTMT.MSL is a script that displays a specific bank statement.
- PRNTSTMT.MSL is a script that prints a specific bank statement.
- OPNCKLST.MSL is a script that displays a specific check listing.

## Chapter C8. Using Command Line Parameters

---

DocumentDirect can be started from a command prompt, an icon, or called from a .BAT file. DocumentDirect recognizes a number of command line parameters that, when provided, modify how it behaves. Command line parameters can be combined. Individual command parameters control whether DocumentDirect:

- Uses an alternate profile file at startup
- Displays a splash screen at startup
- Runs a script at startup
- Opens a file at startup
- Recognizes a file as a script file at startup and runs the script even though the file doesn't have an .MSL file extension
- Suppresses or displays warning messages

### Command Line Parameters

---

The following table describes DocumentDirect's command line parameters.

Parameter	Description
-----------	-------------

Parameter	Description
["full path and filename.xxx"]	<p>When the filename <b>does not</b> have a script file extension, this parameter specifies the document that DocumentDirect is to open at startup.</p> <ul style="list-style-type: none"> <li>• If the file is not located in the same directory as DocumentDirect, the full path must be included.</li> <li>• To run a script to modify a document, the script filename must follow the document filename on the command line.</li> <li>• Long filenames that contain spaces must be enclosed within double quotes.</li> </ul>
["full path and filename.MSL"]	<p>When the filename has a script file extension (.MSL), this parameter specifies the script file that DocumentDirect is to run at startup.</p> <ul style="list-style-type: none"> <li>• If the script file is not located in the same directory as DocumentDirect, the full path must be included.</li> <li>• To run a script to modify a document, the script filename must follow the document filename on the command line.</li> <li>• Long filenames that contain spaces must be enclosed within double quotes.</li> </ul>
/A  Equivalents: /a, -A, -a	<p>Instructs DocumentDirect to suppress all warning messages during script processing. Use this parameter if the script will be running in unattended mode. However, if an error is critical, the message is displayed and script execution stops.</p>
/DOCSEVER ["document server name"]  Equivalents: /docserver, -DOCSEVER, -docserver	<p>Instructs DocumentDirect to open the Document Explorer window, locate the document server in that window, and open that document server.</p> <p><b>Note:</b> This command is not available in DocumentDirect Application Suite.</p>
/E  Equivalents: /e, -E, -e	<p>Runs the script without stopping for or reporting errors, except in the following cases:</p> <ul style="list-style-type: none"> <li>• The script command contains syntax errors.</li> <li>• A script file does not load successfully.</li> <li>• A document server specified in the script file cannot open.</li> </ul>

Parameter	Description
/EXPLORER  Equivalents: /explorer, -EXPLORER, -explorer	Instructs DocumentDirect to open the Document Explorer window.  <b>Note:</b> This command is not available in DocumentDirect Application Suite.
/F ["full path and filename.xxx"]  Equivalents: /f, -F, -f	When the filename has a <b>file extension other than .MSL</b> , this parameter specifies the script file that DocumentDirect is to run at startup. <ul style="list-style-type: none"> <li>• If the script file is not located in the same directory as DocumentDirect, the full path must be included.</li> <li>• To run a script to modify a document, the script filename must follow the document filename on the command line.</li> <li>• Long filenames that contain spaces must be enclosed within double quotes.</li> </ul>
/NOSPLASH  Equivalents: /nosplash, -NOSPLASH, -nosplash	Suppresses the display of the Mobius splash screen at startup.
/PROFILE ["full path and filename"]  Equivalents: /profile, -PROFILE, -profile	Specifies the file DocumentDirect is to use instead of the default RDSWIN.INI profile file. <ul style="list-style-type: none"> <li>• The alternate RDSWIN.INI file can be named according to your site-specific naming conventions and does not have to have a file extension of .INI.</li> <li>• If the file is not located in the same directory as DocumentDirect, the full path must be included.</li> <li>• Long filenames that contain spaces must be enclosed within double quotes.</li> </ul>
/W  Equivalents: /w, -W, -w	Instructs DocumentDirect to display all warning messages during processing. Use this parameter when someone will be available to respond to DocumentDirect messages and prompts.

## Examples

The following command line starts DocumentDirect using the default profile file and displays the Mobius splash screen.

```
C:\MOBIUS\DDR\RDSWIN
```

The following command line starts DocumentDirect using the RDS2.TXT profile file instead of the RDSWIN.INI file.

```
C:\MOBIUS\DDR\RDSWIN /PROFILE D:\PROFILES\RDS2.TXT
```

The following command line starts DocumentDirect, suppresses the display of the Mobius splash screen, and instructs DocumentDirect to run the MONTH END script without displaying warning messages.

```
C:\MOBIUS\DDR\RDSWIN /NOSPLASH "G:\SCRIPTS\MONTH END.MSL" /A
```

The following command line starts DocumentDirect and instructs DocumentDirect to open the DAILY REPORTS file and run the WEEKLY script on it without displaying warning messages.

```
C:\MOBIUS\DDR\RDSWIN "C:\RPTS\DAILY REPORTS.RPT" /F "G:\SCRIPTS\WEEKLY.TXT" /A
```

The following command line starts DocumentDirect and instructs DocumentDirect to open the DAILY REPORTS file and run the WEEKLY script on it while ignoring error messages.

```
C:\MOBIUS\DDR\RDSWIN "C:\RPTS\DAILY REPORTS.RPT" /F "G:\SCRIPTS\WEEKLY.TXT" /E
```

The following command line starts DocumentDirect and instructs DocumentDirect to open the Document Explorer window. Note that the /EXPLORER parameter cannot be used with DocumentDirect Application Suite.

```
C:\MOBIUS\DDR\RDSWIN /EXPLORER
```

The following command line starts DocumentDirect and instructs DocumentDirect to open the Document Explorer window, locate the FINANCIALS document server, and attempt to connect to that server. Note that the /DOCSERVER parameter cannot be used with DocumentDirect Application Suite.

```
C:\MOBIUS\DDR\RDSWIN /DOCSERVER "FINANCIALS"
```

## Chapter C9. INI Files and Registry Settings

---

DocumentDirect records user preference and customization settings in its RDSWIN.INI file and the Windows Registry. DocumentDirect Application Suite records settings in the RDSWIN.INI file, Windows Registry, and in an additional processing profile. Each of these settings is described in this section.

### *Customizing the RDSWIN.INI File*

---

The RDSWIN.INI file contains information about your Windows environment. It gives both DocumentDirect and DocumentDirect Application Suite the information needed to operate properly. This section describes the profile options and settings found in the RDSWIN.INI file.

**Note:** It is recommended that you establish and modify the profile settings in the

RDSWIN.INI by using the appropriate dialogs:

- You select and modify communications protocol settings with the dialogs available under **Options|Document Servers**.
- You create and modify DocumentDirect's Document Explorer configurations with the dialogs available under **Options|Document Explorer**.
- You select and modify security, administrative, viewing, windowing and other user preference options with the dialogs available under **Options|Preferences**.

For complete instructions on establishing and modifying these settings, see "Setting User Preferences" in Chapter C1.

If required, you can create more than one version of the RDSWIN.INI profile file and you can control which version is used at startup. See Chapter C8, "Using Command Line Parameters" for details on using the /PROFILE command line parameter.

A sample RDSWIN.INI file is shown below.

```
; Sample RDSWIN.INI file

[AFP]
; Full path of the directory where your AFP resources
; are located
; AFPResourcePath=path\afpresources
AFPResourcePath=C:\RDSWIN\AFPRESRC
; CacheResources=No (default is Yes)
; Do not add entry unless you do not want to cache resources
CacheResources=No

[COLORDEPTH]
; Color depth settings for the displayed image
```

```
; The image is displayed using 8 bits per pixel, which is equivalent to 256
colors
BITSPERPIXEL=8
GRAYSCALE=N

[DJDE]
; Full path of the directory where your DJDE/Metacode resources
; are located
; DJDEResourcePath=path\djderesources
DJDEResourcePath=C:\RDSWIN\DJDERSRC
; CacheResources=No (default is Yes)
; Do not add entry unless you do not want to cache resources
CacheResources=No

[DS_VDRNET]
Protocol=Windows Server
PromptForLogin=Y
AllowSaveLogin=Y
Recipient=ADMIN
Password=
ReportNameAutoExpand=1
ReportSectionAutoExpand=0
ReportVersionAutoExpand=1
ReportViewModeAutoExpand=1
TopicItemAutoExpand=0
TopicNameAutoExpand=0
TopicReportNameAutoExpand=0
TopicReportVersionAutoExpand=0
TopicVersionAutoExpand=0
```

```
TopicViewModeAutoExpand=0
TopicItemExactMatch=Y
ReportNameLocateValue=AC001
ReportVersionLocateValue=2
```

```
[EXPLORER]
; This section is used only by DocumentDirect
; List of drives accessible in Document Explorer. Drives are
; separated by a comma or dash. If blank, all drives are listed.
DriveList=A,C-N
```

```
[FIND_PREF]
; Page limit on Find request.
ContinuePromptLimit=200
; Search for string in 200 pages before issuing message to user
```

```
; to continue searching or cancel.
```

```
[FONT]
```

```
; Information on the font displayed.
Font=Courier New
FontStyle=Regular
Size=8
CharSet=0
; DisplayNonFixedPitch acceptable values are Yes and No.
DisplayNonFixedPitch=No
```

```
[IMAGE]
```

```
; Settings for viewing image pages.
; Select custom sizing of image.
Sizing=2
; Display image at a height of 902 units.
Height=902
; Display image at a width of 158 units.
Width=158
; Display image in millimeters.
Units=1
; Display image rotated 90 degrees.
Rotation=1
; Display multipage images in compound mode.
Multipage=0
```

```
[LPFD]
```

```
; LPFD display settings.
; Maximize resolution as image is rescaled.
ResampleLPFDPages=Yes
; Use five shades of gray scaling in LPFD images.
LpfdGrayScaleMethod=2
```

```
[MISC]
; This section contains miscellaneous user settings.
; SavePasswords acceptable values are Yes and No.
SavePasswords=Yes
; HelpFilePath indicates the path of the directory
; where your help system file is located.
HelpFilePath=K:\MOBIUS\DDR14\RDSWIN.HLP
; ServerWarningLevel indicates the type of error and
; warning messages to be saved in your server's message log.
```

```
ServerWarningLevel=16; DefaultWarningLevel indicates the type of error and
; warning messages that will be saved in your RDSWIN.MSG file.
DefaultWarningLevel=16
; Timeout specifies the length of time DocumentDirect and
; DocumentDirect Application Suite wait
; before shutting down automatically.
Timeout=10
; SilentTimeout instructs DocumentDirect and
```

```

; DocumentDirect Application Suite to terminate
; automatically without displaying the Time Out dialog.
SilentTimeout=Yes
; RWLTimeout specifies the number of hours before DocumentDirect
; and DocumentDirect Application Suite automatically expire
; a ReadWrite lock
RWLTimeout=2
; ULTimeout specifies the number of hours before DocumentDirect
; and DocumentDirect Application Suite automatically expire
; an Update lock
ULTimeout=36
; AuthorizationCode=code number
; AuthorizationCodeDdrapp=code number
; Annotations are displayed automatically when documents are opened
OpenAnnotations=N
; When the document contains annotations,
; displays the Paper Clip icon on the status bar
; and in DocumentDirect's Document Explorer window
AnnotationIndicator=Y

[PCL]
; Full path of the directory where your PCL resources
; are located

```

```

; PCLResourcePath=path\pclresources
PCLResourcePath=C:\RDSWIN\PCLRSRC
; CacheResources=No (default is Yes)
; Do not add entry unless you do not want to cache resources
CacheResources=No

[PDF]
; Full path of the directory where your PDF and PostScript
; resources are located
; PDFResourcePath=path\pdfresources
PDFResourcePath=C:\RDSWIN\PDFRSRC
; CacheResources=No (default is Yes)
; Do not add entry unless you do not want to cache resources
CacheResources=No

```

## Valid RDSWIN.INI File Values

### [AFP] Section

The [AFP] section contains settings that define your Advanced Format Presentation environment to DocumentDirect. The table below summarizes the required entries. See Chapter C1, "Setting User Preferences" for information on user-defined contents of the AFP Resources directory.

Key	Valid Values	Description
AFPResourcePath	<i>path</i>	Full path name of the directory in which your AFP resources are stored. The default path is <i>root\CACHE\AFP</i> where <i>root</i> is the directory one level above the directory where DocumentDirect is installed.



Key	Valid Values	Description
CacheResources	Yes	AFP resources are written to the AFPResourcePath directory. DocumentDirect uses those resources. Yes is the default.
	No	AFP resources are not written to the AFPResourcePath directory. DocumentDirect uses any resources already present in the AFP Resource directory, but does not add to that directory.

## [Annotations] Section

The [Annotations] section contains settings that define how you view and edit annotations.

Key	Valid Values	Description
Font	<i>font name</i>	Font used for annotations that contain text. Arial, or similar for Japanese, is the default.
FontStyle	Regular Bold Italic	Style of font used for annotations that contain text. Regular is the default.
Size	<i>n</i>	Size of font, in points, used for annotations that contain text. 10 is the default.
HideReadOnly	Y	When Edit Annotations is selected from the DocumentDirect toolbar, show only annotations created by current user.
	N	When Edit Annotations is selected from the DocumentDirect toolbar, show all annotations. N is the default.

## [COLORDEPTH] Section

The [COLORDEPTH] section contains color depth settings for the displayed image.

Key	Valid Values	Description
-----	--------------	-------------

Key	Valid Values	Description
BITSPERPIXEL	0	Number of bits per pixel used to display the image. This number is translated into a number of colors.  The number of colors stored in the image. 0 is the default.
	1	2 colors: black and white
	2	4 colors
	4	16 colors
	8	256 colors
	24	16 million colors
	32	True color
GRAYSCALE	Yes	Sets the image to 256 shades of gray.
	No	Sets the image to the number of colors specified in BITSPERPIXEL.

## [DJDE] Section

The [DJDE] section contains settings that define your Xerox DJDE/Metacode environment to DocumentDirect. The table below summarizes the required entries.

Key	Valid Values	Description
CacheResources	Yes	Xerox DJDE/Metacode resources are written to the DJDEResourcePath directory. DocumentDirect uses those resources. Yes is the default.
	No	Xerox DJDE/Metacode resources are not written to the DJDEResourcePath directory. DocumentDirect uses any resources already present in the DJDEResourcePath directory, but does not add resources to that directory.

Key	Valid Values	Description
DJDEResourcePath	<i>path</i>	Full path of the directory where your Xerox DJDE/Metacode resources are stored. The default path is <i>root\CACHE\DJDE</i> where <i>root</i> is the directory one level above the directory where DocumentDirect is installed.

### [DS\_*ServerName*] Section

The [DS\_*ServerName*] section contains settings that define auto-expand, communications protocol, and authentication settings for each document server used in DocumentDirect. *ServerName* indicates the document server name as it appears in your list of document servers. For example, if your list of document servers shows a document server named "Miscellaneous Inventory Reports," the RDSWIN.INI file contains a [DS\_Miscellaneous Inventory Reports] section with the selected settings for that document server. There is one [DS\_*ServerName*] section in the RDSWIN.INI file for each document server defined in DocumentDirect.

Three sets of settings comprise the [DS\_*ServerName*] section:

- Auto-expand Settings
- Communications Protocol Settings
- Authentication Settings

#### *Auto-expand Settings*

The table below summarizes the settings in the [DS\_*ServerName*] section that determine how a document server automatically expands when a user connects to it.

Key	Valid Values	Description
ServerNameAutoExpand	0	Do not auto-expand document server name. The default is 0.
	1	Auto-expand document server name.
ReportViewModeAutoExpand	0	Do not auto-expand report view mode. The default is 0.

Key	Valid Values	Description
	1	Auto-expand report view mode.  <b>Note:</b> Do not use this key if you use the TopicViewModeAutoExpand key.
ReportNameAutoExpand	0 1	Do not auto-expand report name. The default is 0. Auto-expand report name.
ReportVersionAutoExpand	0 1	Do not auto-expand report version. The default is 0. Auto-expand report version.
ReportSectionAutoExpand	0 1	Do not auto-expand report section. The default is 0. Auto-expand report section.
TopicViewModeAutoExpand	0 1	Do not auto-expand topic view mode. The default is 0. Auto-expand topic view mode.  <b>Note:</b> Do not use this key if you use the ReportViewModeAutoExpand key.
TopicNameAutoExpand	0 1	Do not auto-expand topic name. The default is 0. Auto-expand topic name.
TopicVersionAutoExpand	0 1	Do not auto-expand topic version. The default is 0. Auto-expand topic version.
TopicItemAutoExpand	0 1	Do not auto-expand topic item. The default is 0. Auto-expand topic item.
TopicReportNameAutoExpand	0 1	Do not auto-expand topic report name. The default is 0. Auto-expand topic report name.

Key	Valid Values	Description
TopicReportVersionAutoExpand	0  1	Do not auto-expand topic report version. The default is 0.  Auto-expand topic report version.
TopicReportSectionAutoExpand	0  1	Do not auto-expand topic report section. The default is 0.  Auto-expand topic report section.
ReportNameLocateValue	<i>reportname</i>	Auto-expand the report with the specified report name. If no report with this name exists, auto-expand the report with the closest matching name.
ReportVersionLocateValue	<i>versionname</i>	Auto-expand the report version with the specified version name. If no report with this version name exists, auto-expand the report with the closest matching version name.
ReportSectionLocateValue	<i>sectionname</i>	Auto-expand the report section with the specified name. If no section with this name exists, auto-expand the section with the closest matching name.
TopicNameLocateValue	<i>topicname</i>	Auto-expand the report topic with the specified name. If no report topic with this name exists, auto-expand the report with the closest matching topic name.
TopicVersionLocateValue	<i>topicversionname</i>	Auto-expand the topic version with the specified topic version name. If no topic version with this name exists, auto-expand closest matching topic version name.

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*Communications Protocol Settings*

The tables below summarize the communications protocol entries in the [DS\_ServerName] section for each of the following document server types:

- CPI-C
- HLLAPI
- TCP/IP
- Remote
- Network
- Standalone

**Note:** Each document server defined in the RDSWIN.INI file uses only one set of these communications protocol settings, depending on the type of document server it is.

**CPI-C Settings**

Key	Valid Values	Description
Protocol	CPIC	Identifies a document server using the CPI-C communications protocol.
SITEntryName	<i>SITentryname</i>	Name by which the destination server is identified in the CPI-C Side Information Table. Used only for CPI-C document servers.
ProductDLLPath	<i>path\file.DLL</i>	Path to WCPIC32.DLL.

**HLLAPI Settings**

Key	Valid Values	Description
Protocol	HLLAPI	Identifies a document server using the HLLAPI communications protocol.
ProcedureName	<i>procedurename</i>	HLLAPI or the procedure used to call HLLAPI.

Key	Valid Values	Description
SessionName	<i>sessionname</i>	Letter that identifies the HLLAPI session under which communication is to be established. Value must be in uppercase.
Transaction	<i>transactionname</i>	Name of your HLLAPI session running under CICS, usually IN20. Value must be in uppercase.
ProductDLLPath	<i>path\file.DLL</i>	Path to EHLAPI32.DLL.

## TCP/IP Settings

Key	Valid Values	Description
Protocol	TCP/IP	Identifies a document server using the TCP/IP communications protocol.
HostName	<i>hostname</i>	IP Address of the document server, in either host name or dotted decimal format.
ServiceName	<i>servicename</i>	Service name of the document server. This can be a service name or a port number.
Transaction	<i>transactionname</i>	Name of your TCP/IP session running under CICS, usually IN22. Values should be in uppercase.
ProductDLLPath	<i>path\file.DLL</i>	Path to WSOCK32.DLL.

## Remote Settings

Key	Valid Values	Description
Protocol	RPC	Identifies a remote document server.
RPC Protocol	ncacn_ip_tcp	DocumentDirect uses the TCP/IP protocol to communicate with the document server.
	ncacn_np	DocumentDirect uses the Named Pipes protocol to communicate with the document server.



Key	Valid Values	Description
	<i>ncalrpc</i>	DocumentDirect uses the Local procedure call protocol to communicate with the document server.
ServerName	<i>hostname</i>	Identity of the machine that hosts the document server. The format of this field varies depending on the protocol you select for the remote machine. For more information, refer to the Protocol table under the Remote tab description in the "Managing Document Servers" section of Chapter C1.
RPC Endpoint	<i>portnumber</i>  <i>pipename</i>	Port number used to communicate with the document server if the RPC Protocol is <i>ncacn_ip_tcp</i> .  Pipe name used to communicate with the document server if the RPC Protocol is <i>ncacn_np</i> .  <b>Note:</b> If the RPC Protocol is <i>ncalrpc</i> , an RPC Endpoint may be defined, but its value is ignored.
DocumentServerName	<i>docservername</i>	Host's name for the document server.

## Network Settings

Key	Valid Values	Description
Protocol	Windows Server	Identifies a network document server.

**Stand-alone Settings**

Key	Valid Values	Description
Protocol	DOS Files	Identifies a stand-alone document server.
PATH	<i>path\file.DAF</i>	Path to the directory where Document Archive Files (DAFs) are located.

*Authentication Settings*

The table below summarizes the settings in the [DS\_ServerName] section that are used to authenticate users when they attempt to connect to a document server.

Key	Valid Values	Description
PromptForLogin	Y	Displays the Attach to Server dialog to prompt users for a Recipient ID and password when they attempt to access a document server. Note that users will only be prompted for the Recipient ID and password the first time they attempt to access a document server if this key is set to Y, the AllowSaveLogin key is set to Y, and users check the "Save Recipient ID and Password" checkbox on the Attach to Server dialog.
	N	Allows users to access document servers without being prompted for a Recipient ID or password. Note that even if this key is set to N, users will be prompted for a Recipient ID and password if their password changes or the administrator configured an incorrect Recipient ID and password for this document server. N is the default.
AllowSaveLogin	Y	Displays the "Save Recipient ID and Password" checkbox on the Attach to Server dialog.

Key	Valid Values	Description
	N	Does not display the "Save Recipient ID and Password" checkbox on the Attach to Server dialog. N is the default.
Recipient	<i>userID</i>	Recipient ID used to connect to the document server. If you do not include this key or you leave it blank, users are only prompted for a Recipient ID and password when they attempt to connect to the document server if PromptForLogin is set to Y.
Password	<i>password</i>	Password used to connect to the document server. If you do not include this key or you leave it blank, users are only prompted for a Recipient ID and password when they attempt to connect to the document server if PromptForLogin is set to Y.

### [EXPLORER] Section

The [EXPLORER] section specifies the drives to be displayed by Document Explorer. This section is not used by DocumentDirect Application Suite.

Key	Valid Values	Description
DriveList	A to Z	Local and network drives that are to be displayed by Document Explorer. Use a comma to separate drive letters and a dash to specify a range of drives. If left blank, all drives accessible to the workstation are displayed.

### [FIND\_PREF] Section

The [FIND\_PREF] section specifies the number of pages within which to perform a search for a specific text string before asking the user to continue or cancel the search.

Key	Valid Values	Description
ContinuePromptLimit	0	Search the entire archive on a FIND request.

Key	Valid Values	Description
ContinuePromptLimit	0  <i>n</i>	Search the entire archive on a FIND request.  Number of pages to search for a FIND request. When this number is reached, issue a message to the user asking to continue or cancel the search.  The default is 500.

**[FONT] Section**

The [FONT] section contains information on the default font supported by DocumentDirect.

Key	Valid Values	Description
CharSet	<i>idnumber</i>	0 – ANSI 1 – Default 2 – Symbol 128 – Shift-JIS 129 – Korean 134 – CHINESE_GB2312 (Simplified) 136 – CHINESE_BIG5 (Traditional) 253 – OEM
DisplayNonFixedPitch	No  Yes	Display only fixed-pitch fonts in the Font dialog. No is the default.  Display all Windows fonts in the Font dialog.
Font	<i>fontname</i>	Face name of the font, such as Arial or Times New Roman.
FontStyle	Regular Italic Bold Bold Italic	Style of the font.
Size	<i>fontsize</i>	Size of the font in points.

**[IMAGE] Section**

The [IMAGE] section contains settings for viewing image pages.

Key	Valid Values	Description

Key	Valid Values	Description
Sizing	0	Size image to fit the window or the paper size, as indicated by the Fit key. 0 is the default.
	1	When opening an image, scale image to a percentage.
	2	Open an image at a custom size.
	3	Open an image to its original size if available, or at 100% scaling otherwise.
Fit	0	When Sizing=0: Open an image to fit the window's width. 0 is the default.
	1	Open an image to fit the window's height.
	2	Open an image to fit the specified paper size.
Scale	<i>number</i>	Open an image scaled to the specified percentage when Sizing is set to scale to a percentage. 100% is the default.
Width	<i>number</i>	Open an image at the specified width if Sizing is set to a custom size.
Height	<i>number</i>	Open an image at the specified height when Sizing is set to a custom size.
Units		When Sizing is set to a custom size:
	0	Use inches as display units.
	1	Use millimeters as display units.
Rotation	2	Use pixels as display units. 2 is the default.
	0	When opening an image: Rotate the image 0 degrees. 0 is the default.

Key	Valid Values	Description
	1	Rotate the image 90 degrees.
	2	Rotate the image 180 degrees.
	3	Rotate the image 270 degrees.
Multipage	0	Open multipage images in compound mode. All sub-pages of TIF and IOCA multi-page images are displayed and printed as a single page.
	1	Open multipage images in individual mode. Each subpage of a multi-page image is displayed and printed as an individual page. 1 is the default.  <b>Note:</b> Multi-page AFP documents are always displayed and printed as individual pages, regardless of this setting.

### [LPFD] Section

The [LPFD] section contains settings for LPFD files.

Key	Valid Values	Description
ResampleLPFDPages	Yes	When scaling LPFD pages, the images are displayed using the highest possible resolution. However, the processing time significantly increases if the image is rescaled. Yes is the default.
	No	When scaling LPFD pages, images are displayed without increasing the processing time. However, the image quality significantly decreases if the image is rescaled.

Key	Valid Values	Description
LpfdGrayScaleMethod	0	Use the maximum number of gray shades for the given LPFD type and the requested resolution when displaying the image.
	1	Do not use gray scaling when displaying the image.
	2	Use five shades of gray scaling when displaying the image. 2 is the default value.

**[MISC] Section**

The [MISC] section contains settings for miscellaneous options.

Key	Valid Values	Description
AnnotationIndicator	Yes	Displays the Paper Clip icon on the status bar when the current open page contains annotations. Also displays the icon in DocumentDirect's Document Explorer window next to the Report Version ID, Report Section ID, Topic Report Version ID, or Topic Entry ID of the document containing annotations. Yes is the default.
	No	Do not display the Paper Clip icon on the status bar or in DocumentDirect's Document Explorer window.
AuthorizationCode	<i>Mobius-supplied authorization code</i>	Authorization code enabling licensed components of DocumentDirect. The code can contain blanks.

Key	Valid Values	Description
AuthorizationCodeDdrap	<i>Mobius-supplied authorization code</i>	Authorization code enabling licensed components of DocumentDirect Application Suite. The code can contain blanks.
BackgroundPrinting	Yes	Enable background printing. Applies only to the following types of documents: <ul style="list-style-type: none"> <li>Documents opened from TCP/IP, network, or stand-alone document servers.</li> <li>Documents opened from a local or network drive.</li> </ul> Yes is the default.
	No	Disable background printing.
DefaultWarningLevel	0, I	Write different types of messages to the RDSWIN.MSG file. Informational, warning, exception, error, and disaster messages
	4, W	Warning, exception, error, and disaster messages
	8, X	Exception, error, and disaster messages
	12, E	Error and disaster messages
	16, D	Disaster messages only (default)  <b>Note:</b> Using a DefaultWarningLevel other than 16 can generate a large amount of output, which may affect system performance.
EnableOAP	Yes	Enable the <b>All</b> option on the Copy To Clipboard, Print, Export To File, and Scope dialog boxes. Yes is the default.



Key	Valid Values	Description
	No	Disable the <b>All</b> option on the Copy To Clipboard, Print, Export To File, and Scope dialog boxes.
HelpFilePath	<i>path\filename</i>  <i>path</i>	Full path and filename of the Help file.  Full path of the directory where the Help file is located.  If no Help file path is specified, the Help file must be located in the directory from which DocumentDirect was started.
InactivityTimeout	<i>n</i>  0	Number of minutes of inactivity DocumentDirect waits before automatically exiting.  Disable Time-Out feature.
KeepLastAnnotation	Yes  No	After the user creates or edits an annotation, the currently selected Annotation tool remains active.  After the user creates or edits an annotation, the last selected Annotation tool is deactivated and the default pointer is selected. No is the default.
MaxReceiveTimeout	<i>n</i>	Maximum number of seconds that a client waits for a response from a ViewDirect for MVS document server. The default is no timeout. If this key is not entered or its value is zero, there is no timeout.
OpenAnnotations	Yes  No	Annotations are displayed automatically when documents containing annotations are opened.  Annotations are not displayed automatically when documents are opened. No is the default.

Key	Valid Values	Description
ReusableSessionCount	<i>n</i>	Maximum number of active unused sessions. These are active sessions that have no archive opened and can be reused when a new document server connection is requested. The default is 1.
	0	No active unused sessions are to remain open after an archive is closed.
RWLTimeout	<i>n</i>	Number of hours before a ReadWrite lock automatically expires. The default is 2.
	0	ReadWrite locks never expire. They are released only as part of normal processing during a DocumentDirect session or manually by the DocumentDirect administrator. <b>Note:</b> For more information on locks, see Appendix E.
SavePasswords	Yes	Save document server passwords in the RDSWIN.INI file in encrypted format. Yes is the default.
	No	Do not save document server passwords in the RDSWIN.INI file. Setting this field to No selects and disables the Prompt for Password check box on both the New and Edit Document Server dialogs. In addition, it disables the Password field.

Key	Valid Values	Description
ServerStartUpTimeout	<i>n</i>	<p>Number of seconds DocumentDirect waits to connect to a ViewDirect for Networks document server, before canceling the connection. The default is 10.</p> <p><b>Note:</b> The 10-second default is sufficient time to connect to a ViewDirect for Networks document server, under normal circumstances. If you are unable to connect within 10 seconds, you should verify whether you have a performance problem in your computing environment before you attempt to increase the key value.</p>
ServerWarningLevel	<p>0, I</p> <p>4, W</p> <p>8, X</p> <p>12, E</p> <p>16, D</p>	<p>Write different types of messages to the document server's message log.</p> <p>Informational, warning, exception, error, and disaster messages</p> <p>Warning, exception, error, and disaster messages</p> <p>Exception, error, and disaster messages</p> <p>Error and disaster messages</p> <p>Disaster messages only (default)</p> <p><b>Note:</b> Using a ServerWarningLevel other than 16 can generate a large amount of output, which may affect system performance.</p>
SilentInactivityTimeout	Yes	Do not display the Time Out dialog when DocumentDirect exits automatically.

Key	Valid Values	Description
	No	Display the Time Out dialog when DocumentDirect exits automatically.
SilentTimeout	Yes, No	SilentTimeout key was replaced with SilentInactivityTimeout key. While the SilentTimeout key may still be used, it is advised that the SilentInactivityTimeout key be used instead.
Timeout	<i>n</i>	Timeout key was replaced with InactivityTimeout key. While the Timeout key may still be used, it is advised that the InactivityTimeout key be used instead.
ULTimeout	<i>n</i>  0	Number of hours before an Update lock automatically expires. The default is 36.  Update locks never expire. They are released only as part of normal processing during a DocumentDirect session or manually by the DocumentDirect administrator.

The following valid keys no longer appear in the [MISC] section. The use of these commands can now be restricted from the **Options|Customize** menu and are stored in the Registry:

- Command.Copy
- Command.Freeze
- Command.Hide
- Command.Move
- Command.Run

**[PCL] Section**

The [PCL] section contains settings that define your Hewlett-Packard PCL environment to DocumentDirect. The table below summarizes the required entries.

Key	Valid Values	Description
CacheResources	Yes	Hewlett-Packard PCL resources are written to the PCLResourcePath directory. DocumentDirect uses those resources. Yes is the default.
	No	Hewlett-Packard PCL resources are not written to the PCLResourcePath directory. DocumentDirect uses any resources already present in the PCLResourcePath directory, but does not add resources to that directory.
PCLResourcePath	<i>path</i>	Full path of the directory where your Hewlett-Packard PCL resources are stored. The default path is <i>root\CACHE\PCL</i> where <i>root</i> is the directory one level above the directory where DocumentDirect is installed.

**[PDF] Section**

The [PDF] section contains settings that define your Adobe PDF and PostScript environment to DocumentDirect. The table below summarizes the required entries.

Key	Valid Values	Description
CacheResources	Yes	Adobe PDF and PostScript resources are written to the PDFResourcePath directory. DocumentDirect uses those resources. Yes is the default.
	No	Adobe PDF and PostScript resources are not written to the PDFResourcePath directory. DocumentDirect uses any resources already present in the PDFResourcePath directory, but does not add resources to that directory.



**[PrintOverflow] Section**

The [PrintOverflow] section contains settings for overflow printing options.

Key	Valid Values	Description
Overflow	0	Tile reports larger than a single printed page. This is the default.
	1	Truncate reports that do not fit on a single printed page. Print only the top right portion that fits on a page, and ignore the rest.
	2	"Fit best" to print the report page on a single printed page. The report page is scaled so that it fills as much of the printed page as possible.

**[Script] Section**

The [Script] section contains settings for scripting playback options.

Key	Valid Values	Description
IgnoreDeleteScript	Yes	Ignore the DELETEScript option for the EXIT or RETURN commands. Do not delete script files.
	No	Recognize the DELETEScript option for the EXIT and RETURN commands and delete a script file when exiting DocumentDirect. This is the default.
IgnoreErrors	Y	Ignore errors generated by script commands and complete script execution, with the following exceptions: <ul style="list-style-type: none"> <li>• The script command contains syntax errors.</li> <li>• The script file does not load successfully.</li> <li>• The document server specified in the script file cannot be opened.</li> </ul>
	N	Do not ignore script errors, halt execution.

Key	Valid Values	Description
PlaybackDelay	<i>n</i>	Value in seconds to pause script execution between steps. This provides time to preview steps before they take place. Tenths of a second are the smallest increment supported.
SkipRetry	Y  N	Do not display Retry dialog when a script error occurs.  Display Retry dialog when a script error occurs. This is the default.
WorkDirectory	<i>path</i>	Directory used by the Playback Script File and Write Script To File dialogs.

### ***Providing Default RDSWIN.INI Settings***

---

DocumentDirect uses the following RDSWIN.INI files:

- The *default* RDSWIN.INI file that was copied into the same directory as the DocumentDirect executable files during installation.
- *Individual* RDSWIN.INI files – one for each user who runs an individual copy of Windows. These files are stored in the users' Windows directories.

The DocumentDirect administrator can update the default RDSWIN.INI file to provide users who run their own copies of Windows with a set of site-specific defaults. When such a user starts DocumentDirect, it determines if there is an RDSWIN.INI file in the user's Windows directory and proceeds as follows:

- If the user has no RDSWIN.INI file, DocumentDirect copies the default RDSWIN.INI file to the user's Windows directory, and the user receives the site-specific defaults. The copied RDSWIN.INI is then further modified with that user's settings, such as server configurations and personal preferences.
- If the user has an RDSWIN.INI file, DocumentDirect uses that file. Consequently, such users must delete their RDSWIN.INI files so that the next time they start DocumentDirect, they receive the site-specific defaults.

**Note:** If required, the DocumentDirect administrator can create more than one version of the RDSWIN.INI profile file and can control which version DocumentDirect uses at startup. See Chapter C8, "Using Command Line Parameters" for details on using the /PROFILE command line parameter.





## Customizing the Registry Settings

The Windows Registry contains the settings for the default and customized commands, menus, toolbars, and logging messages. These Registry settings are customized using the Customize dialog under the **Options|Customize Interface** menu item. For complete instructions on customizing toolbars and menus, see Chapter C1.

The DocumentDirect customizations are stored in the Windows Registry under the following root key:

```
HKEY_CURRENT_USER\Software\Mobius\DocumentDirect 2.2\Customizations
```

The DocumentDirect Application Suite customizations are stored in the Windows Registry under the following root key:

```
HKEY_CURRENT_USER\Software\Mobius\DocumentDirect Application Suite  
1.2\Customizations
```

Beneath the root key are subkeys for commands, menus, and toolbars. Each of these is described below. References to specific product names have been replaced with the words "product name and version."

### Commands

The Commands subkey contains all customizations made to commands, including any custom commands. A command consists of a name, caption, image, type, and whether it is restricted. The command name, used to identify the command, is a subkey under the Commands subkey. For example, any customizations for the Exit command appear under the following key:

```
HKEY_CURRENT_USER\Software\Mobius\product name and  
version\Customizations\Commands\Exit
```

Each command subkey may contain the following value names:

Value Name	Value Data	Description
Caption	<i>Any valid command caption</i>	Caption of the command, used as tooltip and menu item text.
CmdLine	<i>Path and filename of the command</i>	Command line for the command. This may include the full path name to the file. This should include any command line parameters for the program. <b>Note:</b> Only applicable for script and program commands.
Image	<i>n</i>	ID of the image to use for this command.

Value Name	Value Data	Description
Restrict	Y	Command is restricted.
	N	Command is not restricted.
Type	0	Command is built-in.
	1	Command is a script.
	2	Command is a program.

## Menus

The Menus subkey contains all customizations made to menus, including the layout of the menu. Under the Menus subkey is a frame subkey that indicates the frame that the menu applies to. Currently, only MainFrame is valid. Beneath the frame subkey are one or more subkeys in numerical order, starting from zero. These subkeys represent submenus or commands. They are ordered numerically, from left to right. For example, subkey 0 represents the leftmost menu (File in the default configuration), and 1 represents the next leftmost menu (Edit in the default configuration). Customizations for menus appear under the following key:

```
HKEY_CURRENT_USER\Software\Mobius\product name and
version\Customizations\Menus
```

The following table shows the value names that appear under a subkey that represent a submenu:

Value Name	Value Data	Description
Caption	<i>Any valid menu caption</i>	Menu caption.
Type	2	Subkey represents a submenu.

The following table shows the value names that appear under a subkey that represent a command:

Value Name	Value Data	Description
CommandName	<i>Any valid command name</i>	Name of the command represented by this menu.
Type	1	Menu item is a command.

Additionally, each submenu subkey may contain additional subkeys, in numerical order, starting from zero. These subkeys represent submenus or commands. The previous tables show the value names that appear under the subkey.

## Toolbars

The Toolbars subkey contains all customizations made to toolbars. Beneath the Toolbar subkey is another subkey representing the frame to which the toolbars are attached.

# MOBIUS

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Currently, only MainFrame is valid. Beneath the frame subkey is a subkey for each toolbar. The name of this subkey is the name of the toolbar. For example, the information for a toolbar named "My Toolbar" would appear under the following key:

```
HKEY_CURRENT_USER\Software\Mobius\product name and  
version\Customizations\Toolbars\MainFrame\My Toolbar
```

Each toolbar subkey may contain the following value names:

Value Name	Value Data	Description
Align	1	Toolbar is docked to the top of the frame.
	2	Toolbar is docked to the left of the frame.
	3	Toolbar is docked to the right of the frame.
	4	Toolbar is docked to the bottom of the frame.
Bottom	<i>n</i>	Bottom coordinate of the toolbar rectangle.
Dock	Y	Toolbar is docked.
	N	Toolbar is floating.
Left	<i>n</i>	Left coordinate of the toolbar rectangle.
Right	<i>n</i>	Right coordinate of the toolbar rectangle.
Top	<i>n</i>	Top coordinate of the toolbar rectangle.
0.. <i>n</i>	<i>Any valid command name</i>	Sequence and command name of buttons on the toolbar. For example, "0" = "Exit" indicates that the first button on the toolbar is Exit.

## Logging Messages

You can change the path and filename of the RDSWIN.MSG file by using the following registry key to specify the path and filename that you want to use:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Mobius\Common 4.1\ErrorLogging\Default
```

The subkey may contain the following value name-value data pair:

Value Name	Value Data	Description
------------	------------	-------------

Value Name	Value Data	Description
LogFile	<i>path</i>	Log processing messages in the specified file and directory. The directory must exist. If the file does not exist, DocumentDirect creates it. If no value is specified, messages are written to C:\WINDOWS\RDSWIN.MSG.

---

## Appendix D. Database Setup

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This chapter explains how to setup a Mobius database or a third-party database.

### Contents

Database Setup Overview

Starting Database Setup

---

### Database Setup Overview

---

The Database Setup client uses a "database engine" to store and control access to much of its data. In addition to the Mobius database engine, which is the same as the one used in Microsoft Access, you can use any of a wide variety of other database engines, including those in products such as:

- Borland Interbase
- Microsoft Access
- Microsoft SQL Server
- Oracle7 Workgroup Server
- Sybase SQL Anywhere

### ODBC Data Source

Use the Database Setup client to specify the desired ODBC data source, which consists of a database engine and the location of the database. When you select an existing engine and database, you point to an existing ODBC data source. When you set up a new engine or database, you create a new ODBC data source, which is configured by the Microsoft ODBC

## *When to Run Database Setup*

Run database setup when you need to:

- Enable access to a Mobius database.
- Enable the Annotations feature before you begin using it.
- Store annotations in a database other than the one currently being used.

The Database Setup client can be used to *initialize* an existing non-Mobius database. Initializing a database erases all the information it contains and prepares it for use by DocumentDirect and ViewDirect for Networks.

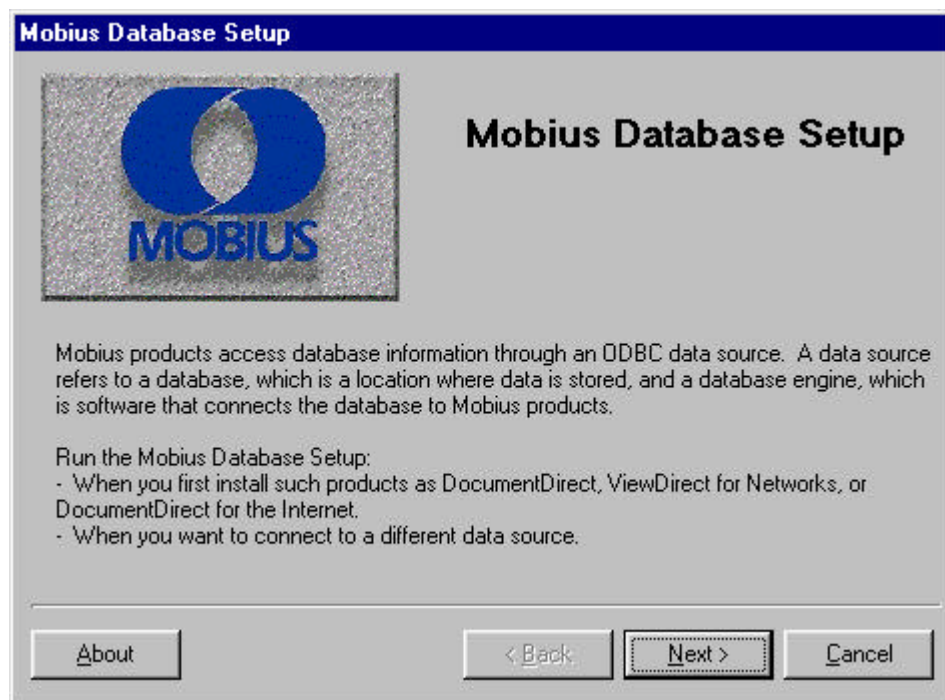
## ***Starting Database Setup***

---

To start database setup, click the Database Setup icon.



The Mobius Database Setup dialog is displayed:



*Figure D-1. The Mobius Database Setup Dialog*

The Mobius Database Setup wizard guides you through configuring ODBC data sources to be

used with DocumentDirect and ViewDirect for Networks. Following the wizard prompts, you can perform the following tasks:

- Configure a new ODBC data source to use a new or existing database.
- Change the current ODBC data source.

When Mobius Database Setup is complete, you can use Mobius product features that require an ODBC database connection.

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## Appendix E. Advanced Annotation Operations

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### Introduction

This appendix is for the DocumentDirect administrator. It describes how to remove annotation locks and how to remove annotation records from the Mobius database. See Chapter 3 for information on creating and editing annotations.

### Contents

- Removing Annotation Locks
  - Automatically Removing Locks
  - Manually Removing Locks
- Removing Annotation Records
  - Interactive Mode
  - Unattended Mode

---

### ***Removing Annotation Locks***

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When a user annotates a page, DocumentDirect creates a record in the Mobius database, called a *lock*, that prevents another user from annotating the page at the same time. The record is automatically deleted, i.e., the lock is released, when the user exits the page. However, if a session terminates improperly, the lock may not get released. When this happens, the lock may expire automatically after a specified period of time or you may want to remove it sooner and need to do this manually.

### **Automatically Removing Locks**

To automatically remove locks, set the following two parameters in the RDSWIN.INI file:

- RWLTimeout – Controls the expiration of ReadWrite locks. A ReadWrite lock is created during the call to the document server that retrieves a page and when annotations are saved to the Mobius database. The lock is released once the page is retrieved or the annotations saved, respectively.
- ULTimeout – Controls the expiration of Update locks. An Update lock is created when the user begins to annotate a page, and the lock is released when the user exits the page.

If you set "reasonable" values for these parameters, such as one hour for RWLTimeout and 24 hours for ULTimeout, you should rarely have to manually remove a lock. For details concerning these parameters, refer to "Customizing the RDSWIN.INI File" in Chapter C9.

## Manually Removing Locks

In rare cases, a user may be prevented from annotating a page by a lock left when another user's session terminated improperly. In these cases the user who cannot annotate the page provides you with the Report ID, Version ID, and page number. You can then manually remove the lock by performing the following steps.

**Caution:** If you remove a lock for a user who is in the process of creating or editing annotations, the user is unable to save changes.

1. Go to the DocumentDirect program group and click the following Annotation Manager icon:



The Annotation Manager window is displayed, as shown in Figure E-1.

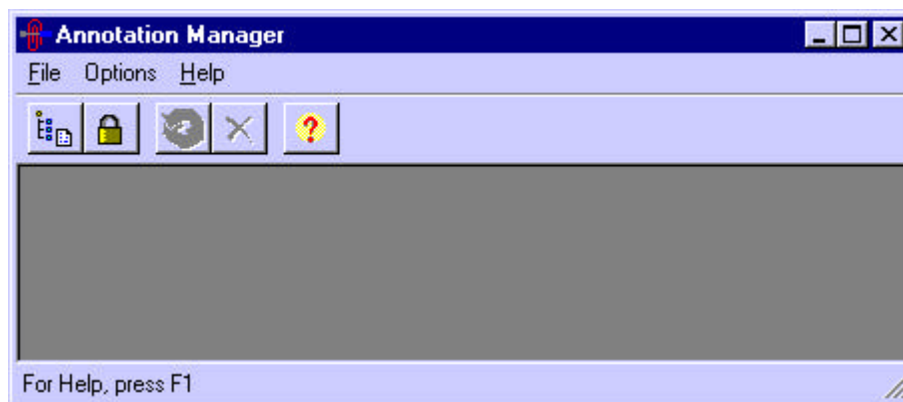


Figure E-1. The Annotation Manager Window

2. Click the following toolbar icon to display a list of annotation locks:





The Annotation Locks window is displayed, as shown in Figure E-2.

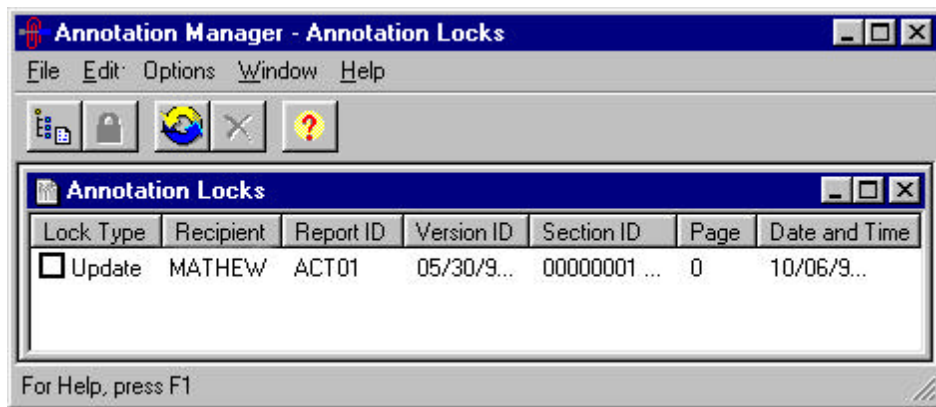


Figure E-2. List of Annotation Locks

3. Select the locks you want to remove by clicking their check boxes.
4. Click the following **Delete** toolbar button to remove the selected locks:



5. Click **File|Exit** to exit the Annotation Manager.

## ***Removing Annotation Records***

---

DocumentDirect provides an Annotation Manager that lets you remove annotation records from the Mobius database. Typically you might want to do this for one of the following reasons:

- To free up storage space in the Mobius database taken up by annotation records belonging to reports that have been deleted.
- To remove corrupted annotation records. For example, if a user receives error **W177E- Unable to locate annotation object handle** when attempting to display or edit annotations, the annotation data for the page is corrupted and no annotation-related operations can be performed on the page. Once this occurs, you must either restore a backup copy of the database or manually remove all annotation data records for the page from the Mobius database.

The Annotation Manager can be used interactively or run in unattended mode. To remove selected corrupted records, you would use it interactively. To free up storage in the Mobius database, you might choose to run it in unattended mode via command line submission using a standard PC or network scheduling system.

### **Interactive Mode**

To remove annotation records from the Mobius database, perform the following steps:

1. Go to the DocumentDirect program group and click the following Annotation Manager icon:



2. Click the following Annotation Explorer button on the toolbar:



The Annotation Explorer window is displayed, as shown in Figure E-3.

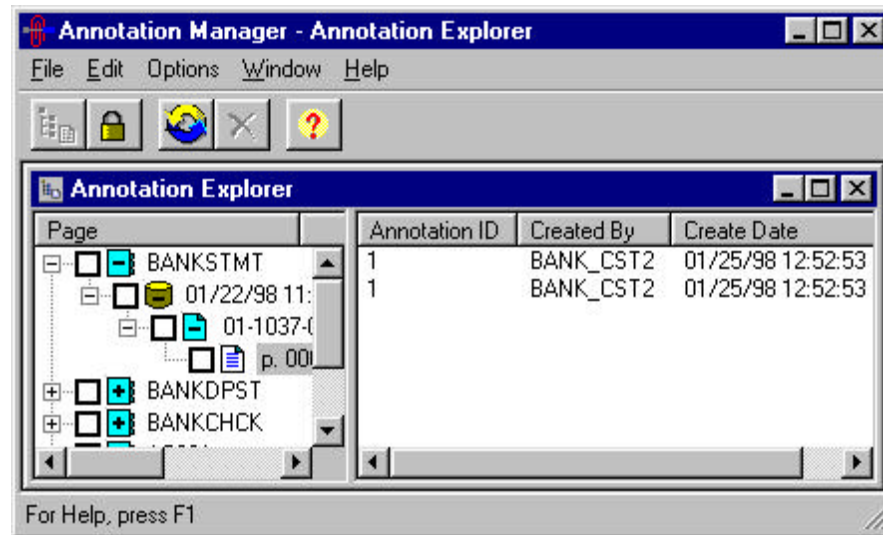


Figure E-3. Annotation Explorer Window

3. Select the annotations to be removed by expanding the explorer tree in the left pane of the window and clicking the appropriate check boxes. Note that selecting a check box at the document level causes all annotations in all versions of the document to be removed.
4. Click the following **Delete** button on the toolbar to remove the selected annotations:



5. Click **File|Exit** to exit the Annotation Manager.

## Unattended Mode

You can delete annotations in unattended mode by executing the command below using a standard PC or network scheduling system:

```
ANNMAN path/filename EXIT
```

where *path/filename* is the path/filename of a file that contains one or more of the annotation maintenance commands documented below. If the path/filename contains spaces, you must enclose it in double quotes. The EXIT parameter is optional. It causes the Annotation Manager to close after unattended processing is completed.

Note that the rules for creating an annotation command file are the same as for creating a script command file. See "Script Command Formatting Conventions" in Chapter 5 for details.

**Note:** These annotation maintenance commands work only in conjunction with Annotation Manager and cannot be used in DocumentDirect scripts.

## DELETEREPORTANN

- Function:** To delete annotations based on some combination of Report ID, Section ID, Version ID, and page number.
- Syntax:** DELETEREPORTANN [REPORTID 'reportid']  
[VERSIONID 'versionid'] [SECTIONID 'sectionid']  
[PAGENUMBER 'pagenumber']
- Parameters:**
- reportid: Report ID. If omitted, all annotations for all reports are deleted.
  - versionid: Report version in the format YYYYMMDDHHMMSS. If omitted, all annotations for the specified report are deleted.
  - sectionid: Report section. If a partial Section ID is specified, all annotations are deleted for the first Section ID that matches the partial ID. If omitted, all annotations for the specified report version are deleted.
  - pagenumber: Report page number for which annotations are to be deleted. If omitted or set to 0, all annotations for the specified report section are deleted.
- Examples:**
- Delete all annotations for the report BANKCHK:  
DELETEREPORTANN REPORTID 'BANKCHK'
  - Delete all annotations for the report version of BANKCHK from January 27, 1998:  
DELETEREPORTANN REPORTID 'BANKCHK'  
VERSIONID '19980127120000'

## DELETEAGEANN

- Function:** To delete all annotations on a page based on age.
- Syntax:** DELETEAGEANN CREATETIME 'age'
- Parameters:** age: Number of days since an annotation was created or last updated. If the ages of all annotations on a page are greater than or equal to the specified number of days, all annotations on the page will be deleted.
- Example:** Delete all annotations on pages where annotations are 30 days or older:  
DELETEAGEANN CREATETIME '30'

Active Window	The window affected by current cursor movements, commands, and text entry.
Advanced Function Printing	See AFP.
AFP	<b>Advanced Function Printing.</b> A device-independent printer architecture developed by IBM. It is mainly used for document interchange, but it is also regarded as a language for printing documents on laser printers. It generates the native IBM printer language, IPDS.
American Standard Code for Information Interchange	See ASCII.
Anchor	A backward, L-shaped character that marks the point at which a mark begins. The anchor is used with Mark Anchor to Caret to mark text.
Archive	A data storage entity (file, dataset, or OAM object). An archive is created by the ViewDirect for Networks Archive Creator client or ViewDirect for MVS Report Input Processing (Phase I of the REPTPROC job). Archives contain either report or topic information and are easily distributed across multiple platforms. See Report Archive and Topic Archive.
Archive File Server	A network-accessible directory where Document Archive Files are stored.
Archive Retention	The total time a report or topic version is kept. Archives may be retained on disk, DASD, tape, optical disk, OAM, or a combination of these media.
ASCII	<b>American Standard Code for Information Interchange</b> , also known as DOS or Plain Text format. ASCII is a data format recognized by most software packages.
Attributes	Characteristics assigned to data in preparation for exporting that data to a CSV or SYLK file. The following attributes are available: <ul style="list-style-type: none"><li>• Block Name</li><li>• Data Type</li><li>• Repeat fill blanks</li><li>• Extend mark to page boundaries</li></ul>
Block	A section of marked text to which attributes have been assigned.
Browser	An Internet application that lets users access World Wide Web servers. A browser interprets tagged files, navigates links, performs searches, and displays the results of searches.
Caret	The Mobius term for the position indicator that indicates where the next text formatting action takes place. It is the same as the Windows cursor.

Case Sensitive Search	A search method that distinguishes between uppercase and lowercase. In a case sensitive search, you must specify the text <i>exactly</i> as it appears in the file. For example, <b>Equipment</b> will not find <b>EQUIPMENT</b> or <b>equipment</b> .
CGI	<b>Common Gateway Interface.</b> A programming standard that lets external applications communicate with information servers, such as HTTP or Web servers. A CGI program takes information that the browser sends to the server, processes the information, and then sends a response to the browser.
Character	An assigned attribute option that specifies that the block contains all the characters in the marked text, including punctuation, blank spaces, and blank lines.
Click-n-Done	The Mobius solution for e-statement presentation and e-billing that consolidates bills, statements, and other financial information for billers and consumers.
Client	Applications that receive data from ViewDirect for Networks or ViewDirect for MVS. The Mobius viewing clients include DocumentDirect, DocumentDirect for the Internet, and DocumentDirect Application Suite.
Comma Separated Variable	See CSV.
Common Gateway Interface	See CGI.
Common Programming Interface for Communications	See CPI-C.
Compound Page	Single page created from the sub-pages of a multi-page image.
Compound Page View	View created when a multi-page image is opened and all of its sub-pages are automatically combined into a single page.
Constant Backforms	Information printed on the back of bills, statements, legal papers, etc., that does not change from page to page. DocumentDirect and DocumentDirect Application Suite treat AFP images with constant backforms as multi-page images.
CPI-C	<b>Common Programming Interface for Communications.</b> One of the communications protocols supported by ViewDirect and by which the Mobius viewing clients can connect to a ViewDirect for MVS report server.
CSV	<b>Comma Separated Variable</b> text. A data format recognized by many software products, used to export data to those applications from the Mobius viewing clients. Each cell in the exported data is separated by a comma; each row is separated by a new line. Text data is surrounded by double quotes.

DAF	<b>Document Archive File.</b> File containing text, graphical, or LPFD data that are accessible by the Mobius viewing clients. DAFs can be stored on ViewDirect document servers or any Windows-compatible storage device. DAFs can also be accessed by the stand-alone document server. Typically, a DAF resides on a workstation's local storage device, such as a hard drive or CD-ROM, rather than on the ViewDirect for Networks document server or the ViewDirect for MVS report server.
Database Engine	Defines the parameters and controls data in a database.
Database Schema	The logical layout or representation of the structures internal to the database. It defines every table and field that comprise the database. Each Mobius database schema is identified by a version number. All Mobius applications require that a database have the correct database schema version number before they are run.
DDE	<b>Dynamic Data Exchange.</b> A means by which Mobius applications can make data available to other applications.
Digital Certificate	A password-protected file containing information that identifies the sender of transmitted data.
DNS	<b>Domain Name Server.</b> An Internet service that maps Internet domain names to IP addresses and maintains a list of the names in use. When a domain name is used, a DNS translates the domain name to an IP address.
Document	An entity that contains text, graphical, or LPFD data such as a file, print list, or report, that can be accessed and viewed by the Mobius viewing clients.
Document Archive File	See DAF.
Document Server	Any document storage location that can be configured as a document server. Document servers can be configured as ViewDirect document servers, ViewDirect for MVS report servers, or any Windows-compatible storage device. Provides services, such as viewing and printing of DAFs, and report and topic archives, to the Mobius viewing clients.
DocumentDirect	Mobius' thick client Windows viewing client.
DocumentDirect Application Suite	Mobius' product for quick implementation of custom Windows viewing clients that perform document search, retrieval, and processing functions.
DocumentDirect for the Internet	Mobius' thin client Internet viewing client, intended for use with Web browsers.
Domain Name Server	See DNS.
Dynamic Data Exchange	See DDE.
Dynamic Marking	A feature of DocumentDirect and DocumentDirect Application Suite that locates and marks all occurrences of specific text in a document. Marks produced with this feature are fixed in size, while their location on the page may vary depending on the location where the text is found.

e-Search & View	The Mobius search engine that integrates into Web applications, providing simple and advanced document searches.
e-Search & View Companion	The Mobius search engine that attaches to Web browsers or the Windows desktop taskbar and provides simple and advanced document searches.
EBCDIC	<b>Extended Binary Coded Decimal Interchange Code.</b> The binary code for text, communications, and printer control used in IBM mainframe and mini computers. It stores each character as an 8-bit code in one byte.
Export	Make archived data available to other software programs, such as spreadsheets or word processors.
Extended Binary Coded Decimal Interchange Code	See EBCDIC.
Extensible Markup Language	See XML.
Extranet	A collection of intranets that are connected to each other by private lines or PPTP (Point-to-Point Tunneling Protocol). For example, a company and its supplier, each with intranets, can establish a joint network application that is accessible to each other, but not to others, by connecting their intranets and forming an extranet.
Fixed-Pitch Fonts	Fonts that have characters of uniform width. Also called monospaced fonts. For example, here is the word "wine" displayed in a fixed-pitch font and in a proportional font: wine – fixed-pitch wine – proportional
Flexible Marking	A feature of DocumentDirect and DocumentDirect Application Suite that locates and marks data in documents where the format changes from version to version, such as reports with varying numbers of lines or columns. Marks produced with this feature may vary in size, and their location on the page may vary depending on the location where the text is found.
Font	A type style or type face. In this context it refers to the look and size of the text displayed by the Mobius viewing client.
Freeze	A way to make certain rows, columns, or both remain displayed while you review a report. For example, if you mark rows that contain column headings of a report, those rows remain displayed while the data in the columns underneath them continue to scroll up or down.
Hide	Remove marked text from the displayed report. Surrounding text moves in to fill the gap left by the hidden text. If, however, you hide text that is part of a freeze, the surrounding text does not fill in the area of the hidden text.



High-Level Language Application Programming Interface	See HLLAPI.
History List	List of the documents most recently opened. Open a document on the history list by clicking the document name once.
HLLAPI	<b>High-Level Language Application Programming Interface.</b> A communications method used by many Windows 3270 emulation packages to connect to a document server.
Home Page	The main page of a collection of Web pages, which can contain links to other pages.
HTML	<b>Hypertext Markup Language.</b> A document-layout and hyperlink-specification language. HTML is a set of embedded directions that tell the browser how to display the contents of the document, including text, images, and other supported media.
HTTP	<b>Hypertext Transfer Protocol.</b> An Internet-standard protocol to send, receive, and respond to the requests issued by Web hyperlinks. It defines how clients and servers communicate over the Web.
Hypertext Markup Language	See HTML.
Hypertext Transfer Protocol	See HTTP.
Image Document	A document containing graphical information, such as a Laser Printer Formatted Document or scanned document.
Inactive Window	A window that is open but not selected in your Windows Desktop. While you can see the contents of inactive windows, no text formatting or other commands affect the data in such a window until it is made active.
Individual Page View	View created when a multi-page image is opened and only one sub-page is displayed at a time.
Intelligent Printer Data Stream	See IPDS.
Internet	<p>A global collection of interconnected computer networks that exchange information using the TCP/IP communications protocol. Some services typically available are as follows:</p> <ul style="list-style-type: none"><li>• File transfer, for example, File Transfer Protocol (FTP)</li><li>• E-mail, for example, Simple Mail Transport Protocol (SMTP)</li><li>• Newsgroups, for example, Network News Transport Protocol (NNTP)</li><li>• Hypertext, for example, Hypertext Transfer Protocol (HTTP)</li></ul>
Internet Protocol Address	See IP Address.

Intranet	A private network of computers that communicate using TCP/IP. The computers can be in any location.
IP Address	<b>Internet Protocol Address.</b> A unique identifier for a computer in a TCP/IP network. IP addresses are added to messages sent by computers to identify the sender and recipient. The addresses are usually expressed in Dotted Decimal Notation, for example, 128.199.198.201, and each number is in the range of 0 to 255.
IPDS	<b>Intelligent Printer Data Stream.</b> A laser-printer device-dependent page description language developed by IBM.
Java Development Kit	See JDK.
Java Native Interface	See JNI.
Java Servlet	A Java program that processes HTTP requests. Java Servlets must conform to the JSDK specification of the Web server environment.
Java Servlet Development Kit	See JSDK.
Java Virtual Machine	See JVM.
JDK	<b>Java Development Kit.</b> A version of Java classes (code) and predefined interfaces that are used in writing Java applets and applications, and Java Servlets. Because the Java language and platform is an evolving standard, JDK version compatibility is an important requirement.
JNI	<b>Java Native Interface.</b> The specifications for the way in which code written in Java can communicate with programs that are not written in Java. The back-end remote Java server communicates with ddihtml.dll by using the JNI specification.
JSDK	<b>Java Servlet Development Kit.</b> A group of Java classes and interfaces that allows Java code to be run on a Java Servlet compliant Web server. Mobius Java Servlets are written to JSDK 2.0 specification.
JVM	<b>Java Virtual Machine.</b> The environment in which Java processes are run. JVM acts as a run-time translator from Java to the local computer type, such as Windows or Solaris.
Laser Printer Formatted Documents	See LPFD.
LPFD	<p><b>Laser Printer Formatted Documents.</b> Documents created using:</p> <ul style="list-style-type: none"> <li>• IBM Advanced Function Printing (AFP), including MO:DCA datastream format</li> <li>• Xerox DJDE/Metacode</li> <li>• Hewlett-Packard Printer Control Language (PCL)</li> <li>• Adobe PostScript and Portable Document Format (PDF)</li> </ul>

Mark	Indicate the corners of a rectangle on the displayed report. Several methods are available for marking text. For example, you can drag the mouse cursor to draw the rectangle, use Drop Anchor and Mark Anchor to Caret commands, or in some cases, you can specify the rectangle by row and column numbers.
Migration	The process of copying report archives from one medium to another.
Mixed Object Document Content Architecture	See MO:DCA.
MO:DCA	<b>Mixed Object Document Content Architecture.</b> An IBM document format for text and graphical elements in a document. MO:DCA is implemented as IBM's AFP page description language.

Mobius Database	The database used to store recipient, report, topic, topic item, annotations, and version information for ViewDirect for Networks.
Mobius Viewing Clients	Software developed by Mobius to access Mobius' ViewDirect archives. DocumentDirect, DocumentDirect for the Internet, and DocumentDirect Application Suite are Mobius viewing clients.
Network File Server	A physical storage device that contains documents accessible by ViewDirect for Networks and the Mobius viewing clients. ViewDirect for MVS replication downloads distribution information and report versions to network file servers for subsequent importing by ViewDirect for Networks.
Non Fixed-Pitch Fonts	See Proportional Fonts.
Number	An assigned attribute option that exports only numeric data.
ODBC	<b>Open Database Connectivity.</b> A standard database protocol by which different database engines may share data without reformatting.
ODBC Data Source	A name assigned through the Database Setup client to a selected database engine/database combination. Data source names are listed and stored in the Microsoft ODBC Administrator.
Open Database Connectivity	See ODBC.
Overstrike Lines, Overstriking Characters	When the second of a pair of lines is displayed or printed on the same line as the first, the second line is called the overstrike line. The characters in an overstrike line are called overstriking characters. DocumentDirect displays and prints overstrike lines, but searches will not find text that is located in overstrike lines and overstrike lines cannot be copied to the Clipboard.
PCL	<b>Printer Control Language.</b> A page description language developed by Hewlett-Packard and used in many of their laser and ink-jet printers.
Point	A measurement of type size. Each point is 1/72 of an inch. In most fixed-space display fonts like Courier, a 12-point size is designed for 6 lines per inch vertically and 10 characters per inch horizontally.
Policy	In ViewDirect for Networks, a set of definitions used to locate the Report IDs, Section IDs, Topic IDs, and topic items with which to create archive index entries during archive creation. In DocumentDirect, DocumentDirect Application Suite, and DocumentDirect for the Internet, a set of field-specific criteria that locates and extracts data from pages in archived LPFD and character reports.
PostScript	A page description language developed by Adobe Systems. It is primarily a language for printing documents on laser printers, but it can be adapted to produce images on other types of devices.
Printer Control Language	See PCL.

Proportional Fonts	<p>Fonts that have characters of varying width. Also called non fixed-pitch fonts. For example, here is the word "wine" displayed in a proportional font and in a fixed-pitch font:</p> <p>wine – proportional</p> <p>wine – fixed-pitch</p>
Recipient ID	Code assigned by the ViewDirect administrator to identify a user to the system. Using the Recipient ID, the system stores and retrieves pertinent information such as a user's distribution address and password.
Remote Method Invocation	See RMI.
Repeat Fill Blank	An assigned attribute option that specifies that blank lines in the exported block contain the data from the line above the blank line. This may be useful for repeating page numbers, line labels, or marking key data to appear with every line of data. This option is not available for DDE links.
Report	A document that is controllable by ViewDirect and accessible by the Mobius viewing clients. Reports can be stored on ViewDirect for Networks document servers or ViewDirect for MVS report servers.
Report Archive	Contains the data for each report version. It is a data storage entity that is easily distributed across multiple platforms. See Archive and Topic Archive.
Report ID	Unique identification for one of your organization's reports. Report IDs are assigned when the reports are defined to ViewDirect for Networks or ViewDirect for MVS.
Report Version	<p>The timestamp that tells when a specific report was generated. Several generations of the same report may be available at the same time. For example, several days of a daily report may be kept on the system for day-to-day comparisons. Also called Version ID.</p> <p>Each version of a report is identified by its Report ID and the timestamp when it was produced. The timestamp is in the format YYYYMMDDHHMMSS (year, month, day, hours, minutes, and seconds) based on a 24-hour clock. Therefore, a report processed on June 30, 1999 at 1:30 P.M. has a Version ID of 19990630133000.</p>
RMI	<b>Remote Method Invocation.</b> A Java specification that allows a program on one machine to run a program on another machine. In effect, it makes a remote object look like a local one. Mobius Java Servlets use this method to communicate with the back-end Java process.
Script	A series of recorded actions that can be saved and invoked whenever you need to perform those actions.
Secure Sockets Layer	See SSL.

Select	Indicate the corners of a rectangle on the displayed report. Several methods are available for selecting text. For example, you can drag the mouse cursor to draw the rectangle, use Drop Anchor and Mark Anchor to Caret commands, or in some cases, you can specify the rectangle by row and column numbers.
Server	A physical storage device that contains documents accessible by the Mobius viewing clients: DocumentDirect, DocumentDirect Application Suite, and DocumentDirect for the Internet.
SSL	<b>Secure Sockets Layer.</b> A security protocol that encrypts and decrypts data, ensuring that data transmitted between a client and a Web server remains private.
Stand-alone Server	A feature of ViewDirect for Networks that stores Document Archive Files (DAFs), which are accessible by DocumentDirect and DocumentDirect for the Internet. Users can access DAFs to be viewed by using a PC directory structure.
Sub-page	Individual image in a multi-page TIF, IOCA, or AFP image.
SYLK	<b>Symbolic Link.</b> A data format recognized by many software products, used to export data to those applications from the Mobius viewing clients.
Symbolic Link	See SYLK.
TCP/IP	<b>Transmission Control Protocol/Internet Protocol.</b> One of the communications protocols by which the Mobius viewing clients can connect to ViewDirect document servers.
Topic	User-defined category by which a type of information can be identified and quickly located across reports using EnterpriseIndexing. For example, one topic might be TELNUM, including all telephone numbers in a report, and another might be CUSTNUM, including all customer numbers.
Topic Archive	A data storage entity that contains the data for each topic version and is easily distributed across multiple platforms. Also see Archive and Report Archive.
Topic ID	Unique identification of a topic, assigned when EnterpriseIndexes are set up for a report. If used in your organization, Topic IDs allow you to select reports by information contained in the report rather than by the Report ID.
Topic Item	The specific index entry for a topic. For example, if the Topic ID TELNUM indexes reports by telephone number, a topic item is a specific telephone number. If the Topic ID CUSTNUM indexes reports by customer number, a topic item is a specific customer number.

Topic Version	<p>The timestamp that tells when a specific EnterpriseIndex topic was started. Several generations (versions) of the same topic may be available for report selection. For example, suppose the Topic ID is TELNUM and it is used to index a group of reports generated daily. To prevent any single version of the topic from becoming too large for convenient use, your ViewDirect for Networks administrator may decide to create a new version of the TELNUM topic each week. If you need to find information from this week, you use the latest version of TELNUM. If you need to find information from last week's reports, you use the previous version.</p> <p>Each version is known by its Topic ID and the timestamp when it was produced. The timestamp is in the format YYYYMMDDHHMMSS (year, month, day, hours, minutes, and seconds) based on a 24-hour clock. Therefore, a topic version that was generated on June 30, 1999 at 12:01 A.M. has an ID of 19990630000100.</p>
Transmission Control Protocol/Internet Protocol	See TCP/IP.
UNC	<b>Universal Naming Convention.</b> An alternative method of describing directory locations based on host and volume name instead of drive letter.
UniversalArchive	A data storage file containing report or topic information created by ViewDirect for Networks or ViewDirect for MVS, generated from, and stored on, any processing platform. These fully-encapsulated archives can be moved to any platform without reprocessing.
Universal Naming Convention	See UNC.
View	A rearrangement of the way a report is displayed on your screen. A change in the view does not change the underlying report in any way, but makes viewing and data extraction easier.
ViewDirect for MVS	A product from Mobius that manages, archives, and retrieves all your online or hard copy documents, employing a true client-server and cross-platform approach.
ViewDirect for Networks	The network version of ViewDirect for MVS designed specifically to support networked, client-server environments, including Windows NT, UNIX, AIX, OS/400, etc., for enterprise document management.
Virtual Directory	A directory outside the home directory that is accessed by browsers as a subdirectory.
Web Browser	See Browser.
Web Page	A document on the World Wide Web. A Web page can contain text, graphics, sound, and animation and can contain hypertext links to other pages.

Web Server	A computer running software that responds to requests from Web clients. The Web server sends the requested file across the Internet to the user who requested it.
Web Site	One or more related Web pages. Multiple pages are linked.
Windows- Compatible Storage Device	A network file server, local hard disk, CD-ROM, or other device capable of managing and providing access to documents and files for use by the Mobius viewing clients and ViewDirect for Networks.
XML	<b>Extensible Markup Language.</b> Format for structured documents and data on the Web that lets you create your own tags. XML tags describe data, rather than describe how the data should look, thereby separating presentation and content.

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